RADIO KAL

HAND BOOK

BOOK NUMBER 3

ISSUED TO:

1 Stanley Keil P.M.

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COMPLETE BOOK

PREFACE

This is a collection of articles on various facets of station operation designed to facilitate the training of new members and as a ready source of information for old members of Radio KAL. The thorough reading of this book will advance your knowledge of radio station operation and will help prevent many of the errors often made by new members and by old members doing new jobs. All who desire to contribute articles on their fields of interest or to amend older articles are invited to do so.

Form: Single space all articles and leave a wide margin on the left to facilitate binding. Try to follow the format of the majority of the articles already printed. Keep it neat.

Organization:

CHAPTER	SUBJECT
I.	**Station Organization: Charter, rules, constitution, staff duties, operating procedures, by-laws, etc.**
II.	Programming: Announcing techniques, record and tape libraries, elementry operation, board engineering, tape production, sources of program material, FCC rules, logs, etc.
III.	Engineering: Maintenance, transmitters, circuits, studios, remotes, technical data, supplies, etc.
IV.	Network Operations: Phone lines, tape networks, UCRN, PCRN, IBS, other stations, etc.
V.	News and Special Events: News formats, sources, organization, beats, reporting, writing, press pases, releases, sports programs, interviews, lectures, live concerts, etc.
VI.	Station Management: Rules, administration, academic departments, finances, publicity, vehicles, keys, forms, licenses, mail and telephone services, history, advice, publications, printing, etc.

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Course	Hours	Place	Course	Date	Time	Place

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STATION RULES

I. RECORDS: NO KAL RECORDS MAY BE REMOVED FROM THE STUDIOS OF THE STATION. There is no-one who can give you permission to remove records from the studios.

II. SMOKING: NO SMOKING IS ALLOWED IN THE STUDIOS. You may smoke in the halls or in the office.

III. FOOD: TRAYS AND COKE BOTTLES MUST BE RETURNED. Persons eating in the studios are expected to clean up after themselves. Alcoholic beverages are forbidden.

IV. OPERATION: ONLY AUTHORIZED KAL MEMBERS MAY USE KAL FACILITIES. No non-members should be left alone in the studios.

V. SECURITY: A. THE OUTSIDE STUDIO DOOR IS TO BE KEPT LOCKED AT ALL TIMES. You may prop it open, but the last person out should close the door. If you have trouble with uninvited guests, call the police (Emergency Number 3333) and the station Manager.

B. KEYS: Do not lend or duplicate your keys.

C. NON-MEMBERS: Only members may operate KAL equipment. Non-members in the studio must be under the supervision of a member who is responsible for their actions.

VI. TAPES: A. TAPE MAY BE REMOVED FROM THE STUDIOS ONLY FOR OFFICIAL KAL BUSINESS AND ONLY WITH THE APPROVAL OF AN EX-COMM MEMBER.

B. UNMARKED TAPE LEFT IN THE STUDIO WILL BE BULK ERASED. If you want it saved, mark it and place it on a shelf in studio B.

VII. FCC RULES: ALL FCC RULES WITH RESPECT TO THE OPERATION OF STANDARD BROADCAST AND FM STATIONS WILL BE OBSERVED.

VIII. TELEPHONES: TELEPHONES ARE FOR OFFICIAL KAL BUSINESS ONLY.

IX. PURCHASES: ALL PURCHASES FOR KAL MUST BE APPROVED BY THE MANAGER.

X. PAYOLA: No announcer or staff member may accept any gift, money, or other consideration in exchange for advertisement, plugs, or air time.

STATION RULES, Cont.

XI. EDITORIALS: Editorials are the prerogative of the Ex-Comm---Announcers may not editorialize. All KAL editorials must be approved by a unanimous vote of ex-comm.

XII. MATURITY: ALL KAL PROGRAMS ARE REQUIRED TO REFLECT MATURITY AND TECHNICAL COMPETENCE.

PROGRAMMING DEPT. RULES

To improve the quality of our programming and to provide for a more enjoyable activity for everyone, we request that all personel observe the following rules:

1. Read the bulletin boards every time you enter the studio. This is our chief means of communication. Personal messages, phone messages, notes from other members, etc. as well as management announcements will be posted here.

2. Please file all records right after your show. If you pull the record adjacent to the one you remove out about two inches, you make this job easy. If possible keep the records you use in order, and the job will take only two or three minutes. Note that KQ, KF, KC, & KJ are different.

3. If you plan a special feature on your show, leave a note about this for the editor of the program guide. This is the only way you can get extra publicity for your show.

4. Please avoid bothering the Language Labs with high volumes--keep the monitor down or the inner doors closed.

5. PSA's and plugs MUST be approved by the Program Director or Manager and entered in the log.

6. Maintain a cheerful tone. If you feel that you don't have much of an audience, complaining about it over the air will only loose that which you do have. If you have problems, bring them up with the Program Director, Manager, or Executive Board--not with your audience.

7. Use the standard sign-on and sign-off tape.

8. Avoid discussion of your religinn, politics, prejudices, or sex life over the air. Keep it clean.

9. Don't disturb the show in progress while you prepare for your show.

10. Keep the outer studio door locked. Those who have been issued keys will loose them if they leave the door unlocked.

11. You are responsible for your time slot. If the music show is pre-empted by a special event, you operate the board or announce for the special event.

12. The Board engineer is responsible for the keeping of the log, the equipment in the studio, and beginning and ending his show on time.

13. Stay within your assigned format.

14. Please get all ID's on time and entered in the log. Your show should end within 30seconds of the appointed time. ID's should be within two minutes of the hour and half hour.

15. Please be on time. If you can't make it, use the roster to find someone to fill for you.

16. We have some funds available for purchase of records. If there is something you would like for your show, leave a note for the record librarian either on the bulletin board or in the lower right hand drawer of the studio desk.

17. Suggestions for the improvement of the station are always welcome. Direct them to your department head or bring them up at the regular Executive Board meetings.

STATION CONSTITUTION

This constitution was drawn up by the Radio KAL Executive Board and by interested station members in a convention held in October 1965. It was approved by the Radio Policy Board after slight modification.

RADIO STATION CONSTITUTION

UNIVERSITY OF CALIFORNIA
BERKELEY, CALIFORNIA

Purpose: The purpose of this station is to further the communication of news, education, and entertainment to the University Community through the radio medium.

Name: The name of this station shall be KAL. If an FM license is obtained, the name may be changed to the call assigned by the Federal Communications Commission.

Members: The Radio Station membership is restricted to registered students of the University of California Berkeley Campus. Full, voting membership is limited to students who have participated for one or more previous semesters (quarters). Associate membership may be granted by the Executive Board to station alumni and to members of the University Community who have rendered exceptional service to the station. Only full members may hold office.

Radio Policy Board: The Radio Policy Board sets overall policy and appoints the Manager, Assistant Manager, Chief Engineer, Executive Secretary, News Director, Special Events Director, and Program Director. The station Executive Board will offer nominations to the Radio Policy Board.

Executive Board: The Executive Board of the station sets operating proceedures for the station in compliance with station policy and the FCC Rules and Regulations. The Executive Board consists of the Manager, Assistant Manager, News Director, Chief Engineer, Program Director, Special Events Director, and Executive Secretary plus two Representatives at large elected by the station membership at the beginning of each semester for a semester (quarter). No individual may serve in the same position on the Executive Board for more than one year. Each member of the Executive Board has one vote. The Board conducts business by a majority of its total membership. The Executive Board can, by a 2/3 vote of its total membership, decide to hold meetings in closed session for discussion of personal matters only. On request of two members of the board, the Manager will call a meeting of the Board within one week. He shall post notice of the meeting in the studio and offices, and shall notify all board members of the meeting. Any board member who cannot attend a meeting may appoint an alternate to represent and vote for him. The Manager serves as Chairman of the Executive Board.

Editorials: Editorial policy is the prerogative of the station Executive Board. All editorials must be set off from other program material and clearly identified as editorials and as not necessarially representing the opionion of anyone other than the Management of Radio KAL. All editorials must be approved by a unanimous vote of the Executive Board. Persons representing opposing views must be offered equal time.

Executive Board Non-Voting Members: The Executive Board may elect non-voting members to itself when it deems their radio experience will be useful in an advisory capacity. Non-voting members of the Executive Board need not be students. The station faculty advisor is a non-voting member of the Executive Board.

Manager: The Manager conducts all business matters of the station, is responsible for day to day operation of the station, and coordinates station activities. The Manager is also responsible for the official representation of the station.

Assistant Manager: The Assistant Manager is responsible for security, personel, the maintenance of the record library, and representing the Manager in his absence.

Chief Engineer: The Chief Engineer is responsible for the installation, construction, and maintenance of station equipment, and for the training, assignment, and supervision of the engineering staff.

Special Events Director: The Special Events Director responsible for local remotes, sports broadcasts, and network operations.

Program Director: The Program Director is responsible for the content and format of the programming and for the training, assignment, and supervision of the program staff.

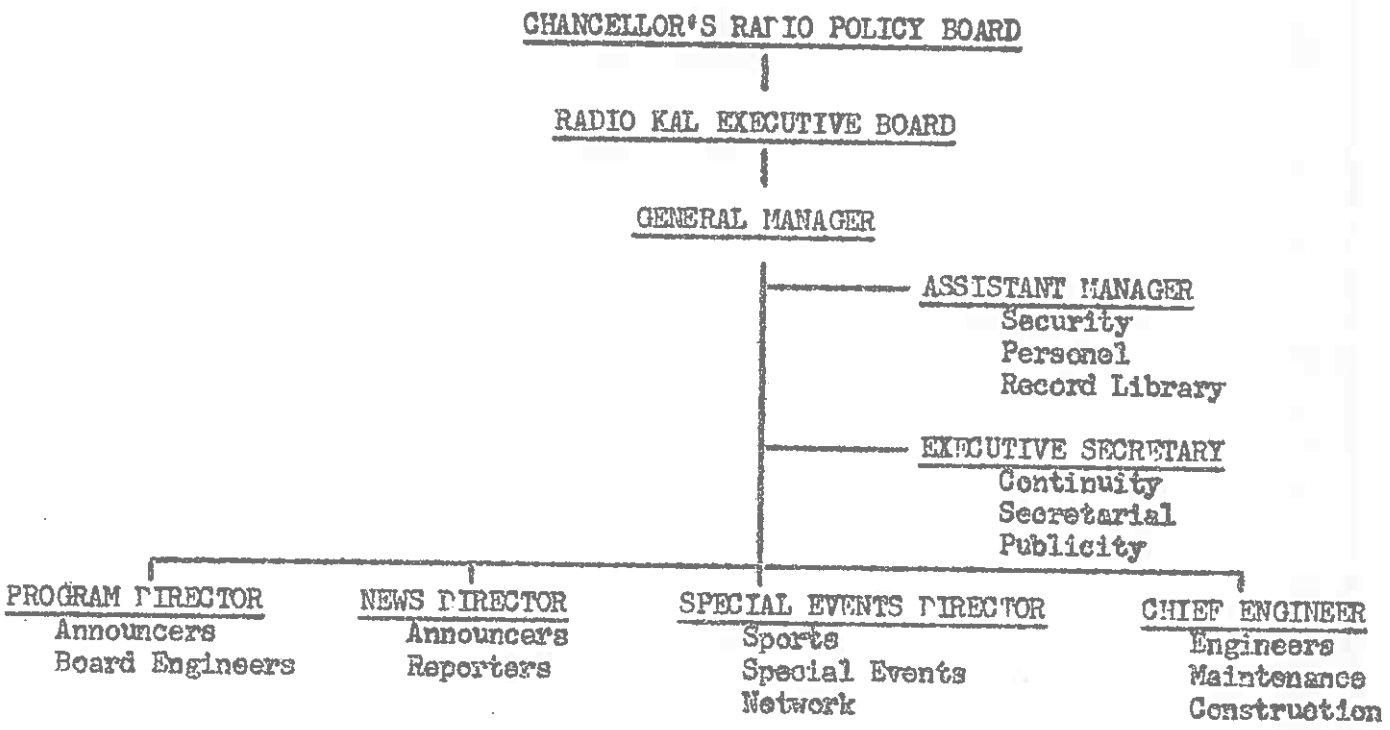
Executive Secretary: The Executive Secretary is responsible for broadcast continuity, publicity, maintenance of the station log, and preparation and distribution of the program guide.

News Director: The News Director is responsible for the news content and preparation and for the training, assignment, and supervision of the news staff.

Ratification and Ammendment: This constitution shall become effective on approval of the Executive Board and the Radio Policy Board. This constitution may be ammended only by a 2/3 vote of the Executive Board, with the approval of the Radio Policy Board.

Approved, Executive Board: Oct 11, 1965
Approved, Radio Policy Board: Oct 12, 1965

This copt dated: Oct 13, 1965
All earlier versions are void.



I. Each of the above four department heads will have at least two assistants.

II. Personel of Radio KAL may work in more than one department. Supervision of their work falls under the department for which they are working at any given time.

III. For more accurate definations of responsibilities, refer to the Radio KAL Station Constitution.

IV. The Station General Manager may delegate duties and powers not specifically outlined above.

GLOSSARY OF RADIO KAL TERMINOLOGY

Acetate Recording Tape	Recording tape manufactured by depositing iron oxides on an acetate plastic backing. When pulled, it snaps. It is translucent.
Amplification	Increasing the volume of an audio signal.
Amplifier	A device used to increase the loudness of a signal or sound.
Attenuation	Decreasing the loudness or level of a signal.
Attenuator	A type of volume control used in professional audio equipment. It has a construction similar to a set of rotary switches and acts to increase or decrease volume in regular steps instead of the continuous action of a volume control used in a hi-fi or home radio. It has the advantages of long life and low noise.
B +	High Voltage direct current power used in tube type electronic equipment.
Balanced	A circuit, such as a phone line, with both conductors the same potential above ground. This helps to reduce noise and cross-talk.
Beeper	The recorder connector provided by the telephone company to allow the connection of tape recorders to telephone lines.
Beldfoil	A type of cable with a shield of aluminum foil and two conductors. Often used for balanced audio lines.
Bi-directional Microphone	A microphone which picks up sound equally from front and back but not from the sides.
Board; Control Board	The control console in the Studios. Used for mixing and amplifing signals from microphones and turntables.

Board Engineer	The engineer who controls the level and content of the signal transmitted by the station. He operates the control console, plays records, plays tapes, controls remote broadcasts, produces sound effects, edits tape, conducts studio maintenance, etc.
Bulk, Bulked	Erasing magnetic recording tape with a magnetic field on a machine independent of the tape recorders. See page 2.215.
Cannon Connector	The plugs used in microphone cables.
Cardiod Microphone	A microphone which picks up sound from one direction only.
Capacitor	An electronic component which stores charges of electrons. Alternating currents can pass through capacitors, but direct currents do not.
Carrier Current	Radio broadcasting at limited power in a limited area by connection of small transmitters to the power lines in buildings such as University Dorms.
Cartridge, phonograph	A device which translates the variations in the grooves in a record into electrical signals. The needle is attached to the cartridge.
Cartridge, tape	A plastic container holding a continuous tape. Used to record and play back short announcements.
Circuit Breaker	A protective device which cuts off electrical power to equipment in emergencies to prevent overloads and fires.
Coil	An audio transformer used in telephone and broadcast work. Any electronic device using loops of wire.
Coax	A type of wire used at high frequencies. It consists of a copper wire in a round plastic tube. The tube is inclosed in a metal foil wrapping.

Crows Foot	A power plug with the prongs mounted at 120 degree angles from each other in a circle. Used in some older University buildings.
Crosstalk	A mixing of signals occuring when wires carrying different signals are run parallel to each other.
Cue	Setting a record or tape so that the program will start an instant after the turntable or recorder is started. Also signaling an announcer that he is to start talking.
Current	The flow of electrons in a conductor.
D-1620; 111C; REP 173	Western Electric transformers widely used in broadcast work.
Dead	Not working; a room with little sound reflection.
Decibel, db.	An electrical and sound measurement used to compare volumes. One db is the smallest change in volume that the human ear can detect. Zero db for electrical work is a power level of one milliwatt in a 600 ohm load.
Diode	An electrical device which allows electric current to flow in only one direction. Used to convert alternating current to direct current and to protect switches against arcing.
Drop-Take	A system used to switch consoles onto and off of the program output line to the transmitters.
Electrical Transcription	A phonograph record.
Equalization.	The electrical adjustment of a circuit, particularly of phonographs and tape recorders, so that they reproduce accurately all of the frequencies and tones present in the orriginal sound.

Ex Comm	A station committee consisting of the Manager, Assistant Manager, Department Heads and their assistants and interested gung-hos.
FCC	The Federal Communications Commission, the governmental body which licenses and regulates radio and television stations, and controls telephone and other forms of electronic communications.
Feed	Providing an audio signal to another area, organization or station over wire lines.
Feedback	The insertion of a portion of the output of an amplifier into the input. If the feedback is in phase, oscillation results. This is often found in PA systems when volume controls are advanced or when a microphone is placed in front of a loudspeaker.
Flat	A flat circuit is one whose frequency response is uniform over a specified portion of the spectrum, i.e. it amplifies all tones within its flat range equally.
Ground	The potential of the surface of the earth. Cases, chassis, and frameworks of all non-portable electronic equipment in the studio are kept grounded.
Ground loop	Multiple paths between a given point and ground. These loops can act as antennas for hum in audio work.
Hub	An aluminum ring on which tape can be wound in place of a reel on the 10inch tape recorders.
Hook-up-wire	Single conductor copper wire used in wiring electronic gear.
IBS	The Intercollegiate Broadcasting System--a loose organization of college radio stations. It provides some engineering data, a monthly magazine, and agreements with the copyright societies for free use of their material for non-commercial educational stations as well as commercial carrier current.

ID	Station Identification. The call Letters and location must be given on the hour and half hour. Other information can be included, such as frequency.
Input Selector	A switching device on the main control room tape recorders which permits the automatic selection of input signal from any of 12 sources.
Jones Plugs	Connectors used in power supplies-usually have four or more pins and are square or rectangular.
Jumper	A temporary wire connection between two circuits.
Kilocycle	A measurement of the frequency with which an altermating current changes its direction of flow. 850kc=850,000cycles per second.
KCD, KCSB, KUCR, KUCW	Stations in the University of California Radio Network.
KZSU	Stanford University Radio Station.
KPFA	A non-commercial station located on Shattuck avenue.
Leader	A white plastic tape which is spliced onto the beginnings and ends of taperecorded shows to facilitate cueing.
Limiter	An electronic device used in the program line to eliminate distortion caused by feeding too high audio levels to the transmitters.
Line loss	Attenuation of an audio signal resulting from the resistive properties of telephone leased lines.
Live	A room with a lot of echo; also a microphone which is on the air; electronic equipment which is on.
Loop	A wire circuit, such as a leased telephone line.

Milliwatt	1/1000 watt. 746 watts equals one horsepower. Zero db. equals 1 milliwatt.
Mouse, Mickey Mouse	Substandard; shoddy.
Multiple	A series of jacks on a patch panel wired so as to allow several circuits to be wired in parallel by patching with patch cords.
Mylar Tape	Magnetic Recording tape made by coating a strip of mylar plastic with iron oxides. This tape stretches and necks down when pulled rather than snapping, as does acetate. Mylar tape is not very translucent.
Normal	Internal wiring of a patch panel which automatically connects circuits together when no patch plugs are pluggen into the jacks associated with the circuits.
Omni-directional Mikes	Microphones which pick up sound equally well from all directions.
Oscillator	An electronic device which generates alternating current. Oscillators which will generate any tone in the audio range are common test instruments.
Pad	A resistive device inserted in an audio line to attenuate the audio level. These pads have losses fixed at the time of manufacture and are characterized by the loss they introduce, i.e., a "6db Pad" or a "40"db pad.
PCRN, Pacific College Radio Network	A loose group of pacific coast college stations which occasionally exchange program material.
Phantom	A circuit which allows four communications channels to be derived from two audio pairs. One of the derived lines is of good quality, the other is a poor quality simplex leg.
Platter	One half of a ten inch tape reel used with hubs for winding tape.

Program Bus	A cable system which distributes the output of the console which is on the air to the limiter, the tape inputs, the headphones, the monitor amplifiers, etc.
PSA	Public Service Announcements. Adds given to civic organizations free of charge to further their activities. These are prepared for University activities, the National Safety Council, CARE, and similar groups.
Radio Policy Board	The Chancellor's committee which sets general policy for the station and makes appointments.
PR-10	A type of Ampex taperecorder.
Relay	A switch which is actuated by a magnetic coil. They are used in remote and automatic control applications.
Remote	A broadcast orriginating out of the studios, such as a sports play-by-play broadcast. Also known as a nemo.
Ringing Current	90volts, 20cycles per second AC current used to ring telephone bells.
Simplex	A circuit allowing one audio pair to be used for several purposes. See pages 3.702 and 3.101.
Talk-back	A communications system between the studios or between a studio and a remote broadcast.
Telco	The Pacific Telephone Company.
U-ground	A style of power plug in common use in state buildings and most new houses.
Uher 4000S	A portable tape recorder used by KAL.
UCRN	The University of California Radio Network. Exchanges news and some live programming. There are stations at Davis, Santa Barbara, Riverside, and Los Angeles.

VU Meter, VU	Volume Units. A VU Meter compares sound signal levels in decibels.
XFMR; XCVR; XMTR; XSTR	Transformer; Receiver; Transmitter; Transistor.
400	A series of telephone no longer used by the telephone company.
500	The current style of telephone used by the telephone company.
351	An Ampex Tape recorder. Tape 2 in KAL control.
403	An Ampex recorder. Tape 1.

PRIZES AND GIVE-AWAY POLICY

The purpose of on-the-air give-aways or contests is to (a) attract listeners, (b) maintain listener interest, (c) and reward faithful listeners.

General: Contests and give aways should not detract from the show and should not interfere with station operation. They are a bonus and are not the sole object of our broadcasting. All contest schemes should meet the following standards:

1. Unimpeachable honesty.
2. Minimum disruption of broadcasting.
3. Equality of opportunity and access for all listeners.
4. Listener interest--either in the contest or in the prizes, or both.
5. No destruction of property or violation of University regulations.
6. All lotteries are forbidden by FCC regulations and by the Communications Act of 1934 as ammended.
7. FCC Rules require that all prizes be as described and that no false or misleading clues be given to prolong the contest. Several stations have lost licenses or been fined on this point.

Prizes: Prizes may be either purchased or donated. They might include, but are not limited to, the following: Records, pizzas, flowers and corsages, junk jewelry, liquid refreshments, gift certificates, lessons of some sort, tape recordings, small appliances, or a year's supply of razor blades or tooth paste.

Use of Telephones: On the air give-away promotion schemes revolving around awarding a prize to the first caller or to the first listener who answers a simple question are very hard to use on Radio KAL, as most of our listeners must call in through dorm switchboards. The Switchboards are not only very slow in the evenings, but the operators have been known to be biased in their placement of calls or to participate themselves. This type of contest results in more lost listeners than it does happy operators.

THE KAL SYSTEM:

The following system has been adopted by KAL to avoid the above problems:

1. All persons who desire to enter the contest do so by sending a postcard with their name and address on it to KAL or by calling or visiting the studio.

PRIZES AND GIVE-AWAYS cont.

2. The names and addresses of all entries are transferred to 3x5 cards. The name and address of each enrtant is written on one side of a 3x5 card.

3. Each entrant's card is folded and taped closed in such a manner that the name is not visable and the card is placed in the drawing box.

4. At each weekly ex-comm meeting, the drawing box is opened and the person in charge of the contest draws the week's winners. The winning cards are placed unopened in sealed envelopes marked with the time and date they are to be announced on the air.

5. The contast manager stapels each days envelopes to the bullitin board. The envelopes can be removed only by the announcer concerned with reading the results.

6. When the envelope is opened and read over the air, the winner has 15 minutes to either call or anpear at the studio.

7. The winner must claim his prize in person and show identification.

8. All prizes must be claimed within two weeks.

9. Prizes may be claimed at any time during station operating hours.

10. All KAL staff members except those running the contest may enter it if the value of the prize is less than $10.00.

11. The contest manager will use care in seeing that the contest is kept fairy that there is no stuffing of the balot boxy and that noone is advised before hand of the names of winners.

12. Any cheating, attempts to cheat, or unfair aid given to potential winners will be grounds for expulsion from the station staff and will result in a report to the Dean of Students' Office.

13. Unclaimed prizes will be replaced in the prize box to be given away in future contests.

14. Announcers or engineers will record on the sheet provided the following data: The date, time, name and address of the winner, and the prize awarded. The prize itself should be marked or taged with the winner's name.

Rough Rider SPORT COATS & SLACKS—HAVE ALL-CLASS APPEAL!

1965-66 GOLDEN BEAR BASKETBALL SCHEDULE

December	1	WEDNESDAY	Alumni	at Berkeley
December	3	Friday	Univ. of San Fran.	San Francisco
December	4	SATURDAY	St. Mary's	at Berkeley
December	10	FRIDAY	Nebraska	at Berkeley
December	11	SATURDAY	Nebraska	at Berkeley
December	17)	Friday	Kentucky Tournament	
December	18)	Saturday	(Kentucky, Indiana, Air Force, California)	Lexington, Ky.
December	20	Monday	Oklahoma	Norman, Okla.
December	23	THURSDAY	Santa Clara	at Berkeley
December	29)	Wednesday	American Legion Tourna-	
December	30)	Thursday	ment (Texas, California, Arizona, Seattle)	Seattle, Wash.
*January	8	Saturday	Washington State	Pullman, Wash.
January	10	Monday	Washington	Seattle, Wash.
January	14	FRIDAY	UCLA	at Berkeley
January	15	SATURDAY	USC	at Berkeley
January	29	SATURDAY	San Jose State	at Berkeley
February	4	FRIDAY	Oregon State	at Berkeley
February	5	SATURDAY	Oregon	at Berkeley
February	11	Friday	Oregon State	Corvallis, Ore.
February	12	Saturday	Oregon	Eugene, Oregon
February	18	FRIDAY	Washington State	at Berkeley
February	19	SATURDAY	Washington	at Berkeley
February	25	Friday	UCLA	Westwood
February	26	Saturday	USC	Los Angeles
..March	4	FRIDAY	Stanford	at Berkeley
March	5	Saturday	Stanford	Palo Alto

*Games televised at 2:30 p.m.

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john and dick

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ENGLISH: The "Original English Tab Collar" in White or Blue Oxford for $7.

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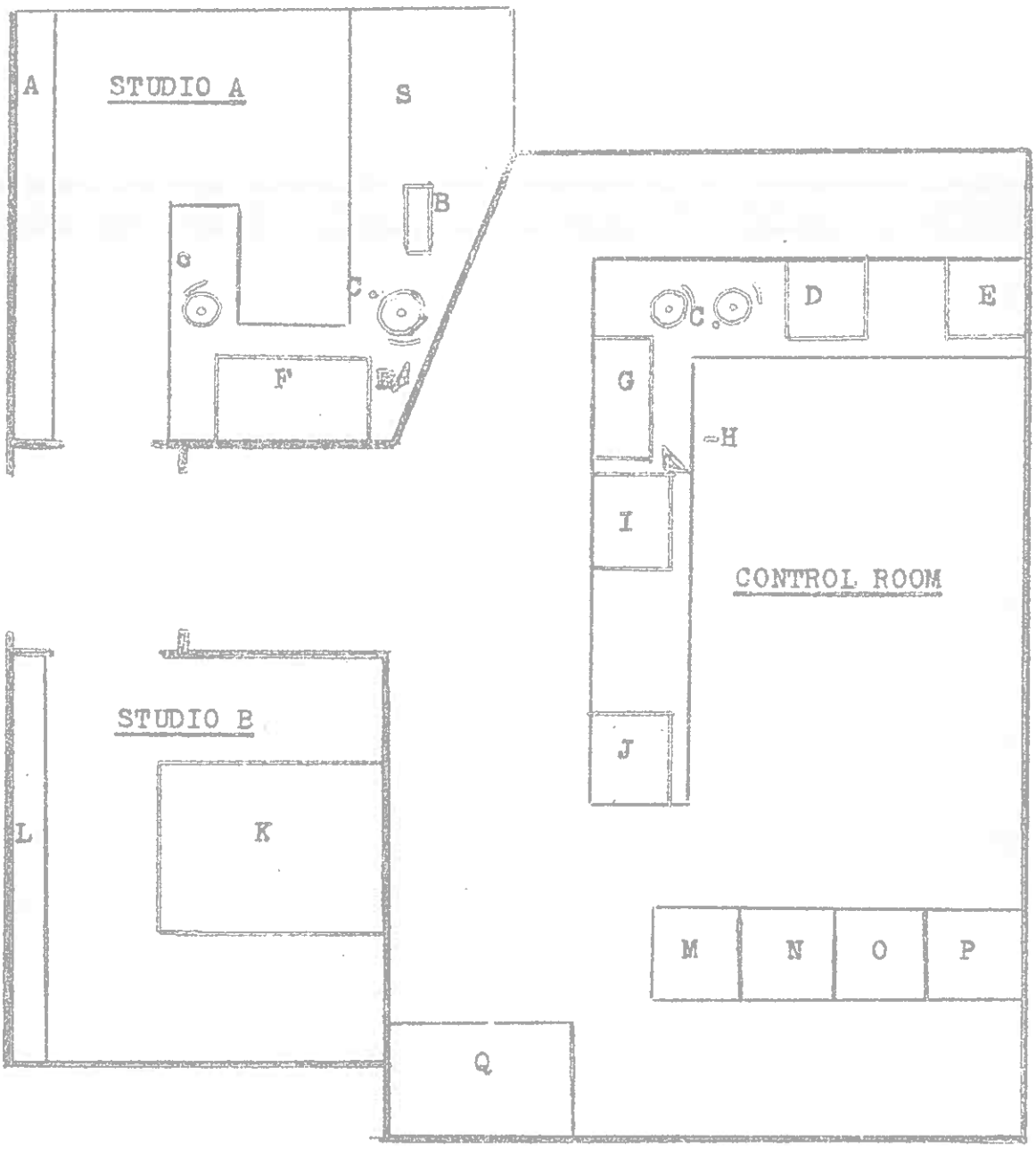

A. Record Library
B. Tape 5 (Sony)
C. Turntables
D. Tape 2 (Ampex 351)
E. Tape 1 (ampex 403)
F. RCA Console
G. RCA Console
H. Control Panel
I. Tape 3 (Ampex PR 10)
J. Tape 4 (Ampex PR 10)
K. Table
L. Tape library
M. Rack 4 (Power)
N. Rack 3 (Relay)
O. Rack 2 (Amplifier)
P. Rack 1 (patch)
Q. Desk
R. Control panel
S. Power rack under table

HINTS FOR ANNOUNCERS

This list of suggestions is designed to help announcers to improve their skills; to provide a more listenable sound for Radio KAL; and to obviate clashes between announcers and Program Directors. Additions and amendments to this list which will result in a better sounding station and a more enjoyable activity are welcomed.

1. If you are not having fun and you find that you don't enjoy what you are doing, have the program directors or Manager find something for you more in line with your interests. Once radio announcing becomes more work than fun, the quality of the program quickly degenerates.

2. If you have a gripe, want a different job, hope for advancement to a management job, etc. --say something! The managers of the stations are all students and are doing a full time job on part time. They can't be expected to find out about your wants and needs by osmosis. If you feel you have been given a raw deal, come to an Executive Board meeting and complain. A corolary to this is: those who do not attend Ex-Comm meetings should not hope for management positions.

3. Never, under any circumstances, degrade the station, its staff, its equipment, its programming, your engineer or your partner over the air. If you convince your audience that you and your station are not worth listening to, they won't listen.

4. "Hangglooseness" is a sign of an insecure or poorly preparod announcer. This fellow screws around on the air, makes mistakes and blames everyone but himself, goes in for sloppy cues, and generally gives the listener the impression that this is a big joke and that it really doesn't matter how competant he is. A sure audience looser every time.

5. Few people have the traditional pear shaped golden tones on the network radio announcer. Don't worry about it. If you talk naturally and have something to say, your audiance won't notice that you are not Harry Von Zell.

6. An announcer who is insecure and unprepared often finds himself with nothing to say. Therefore, he says only ..."that was....., and this is..." between each record or resorts to discussion of only the things he can see in front of him -- his engineer, the studio, the record jacket. If you don't have a ready line of chatter and a fast tongue, take to bringing some crutches with you, such as the Daily Cal, magazine and newspaper clippings, humerous stories, notes on happenings around the campus, comments on the movie you last saw, etc. As your confidence grows, so will your skill at off the cuff conversation.

7. If you make a mistake in announcing the wrong record, mispronunciation, or what have you, go on with the show as if nothing has happened. If necessary, correct your mistake, but do not call attention to it. Most of your audience didn't notice it, so why call attention to it?

8. Plan what you are going to say so that you don't repeat yourself or forget what you were going to say. If you find that it helps, make notes or write out what you want to say.

9. Read over all material to be read on the air at least once before you do it live. If necessary, use the NBC Pronunciation handbook to check doubtful words.

10. Try not to turn away from the microphone while on the air. This lowers the volume of your voice and changes its pitch. When you talk directly into the mike, your voice is loud and the mike picks up all of its frequency components. When you talk across or beside a mike, it picks up less volume and less high frequency components of your speach. This tends to be annoying to listeners.

11. Try to avoid "ah", "and ah", etc. If you have trouble with this, try reading copy rather than ad libing. A taped air check will help you stop this habit.

12. Have your engineer make an "air check" tape and listen to it after the show. You will be able to see for yourself where improvements can be made. It is also helpful to listen to other announcers and try to find the good and bad points in their techniques, comparing their efforts to yours.

13. Don't introduce PSA's by saying: "....well, now I have to read a PSA." Just read it.

14. Keep "In" jokes off the air--they just confuse and annoy the audience.

15. Don't handle live mikes, as they emit clicks, thumps and screeches.

16. Make your shows end on time. If you use a theme or plan to end with an instrumental, its easy to get the ID's right on the hour.

17. ID's must be given within two minutes of the hour and half hour. All ID's and PSA's must be noted in the log.

18. Don't talk down to your audience. Anyone who manages to stay in this school isn't stupid.

19. Keep the studio neat for the next guy.

20. Background music is useful for maintaining moods on music and dramatic shows. It should be far enough below the level of the announcer's voice so that it does not compete with him for listener attention.

21. Musical introductions build listener identification, create moods, and add interest. They should complement the show that they are used with. See page: 2.210.

22. Speak forcefully and try to put as much inflection into your speach as possible without seeming overly dramatic.

23. All equipment failures, ID's, PSA's, and program titles with times should be entered into the log and signed by the board engineer or combo operator.

24. If you plan special features for your show, have guests, a rare record, etc., inform the program guide editor so that you will get maximum publicity. Write out a station promo about your show and put it in the station promo section of the PSA book--as long as you have gone to all that work, you may as well have as many appreciative listeners as possible.

25. Please answer phones with "Radio KAL," "K-A-L," "Radio Cal," or some similar phrase. Even just "Hello" is better than "Yeah?".

26. Where possible, one PSA and one Station Promo should be read (or played, if on tape or disc) each hour. This is a co-operative effort. If you build up your buddies show, he'll build up yours, and you both do yourselves a favor.

27. Stick to your format. Our listeners depend on finding what is advertised in the program log. If we cheat them, they will soon find that there are about 30 other AM stations in this area.

30. Board operators should be sure that the announcer's voice is at about the same level as the program material. Keep levels as high as possible without over modulating. (Over-modulation causes distortion.)

31. Do not converse with your engineer over the air. Use talkback and sound like you are organized and competant.

32. Seek to minimize dead air, but avoid overly tight cues--the ones that start up with the music under the needle.

33. Use a variety of ID's and station Promos during your show. Use taped ID's as well as live ones.

34. A standard introduction (theme) and exit tape should be prepared for each show. The reel and box should be clearly marked and kept on a tape shelf when not in use.

35. Arrive at the studio well before air-time for your show so that you will be well prepared.

36. Audition records off the air. Listen to what you play before you go on the air--avoid playing "dogs."

37. Pull out the record adjacent to the ones you remove to aid reshelving your records.

38. Use sound effects in music shows as little as possible--if ever. They arn't half as funny over the air as they sound in the studio.

39. Avoid playing currently popular records to death--too much of a good thing becomes boring quickly.

40. Talk about six inches away from the microphone. If you are closer, the mike picks up toungue, teeth, and breathing sounds; if you are too far away, the gain must be turned up on the console and this results in increased electrical noise. For sports programs or other programs from noisy areas, if may be necessary to talk very close to the mike.

41. Beware of chairs that squeek.

42. Keep an eye on your engineer while you are on the air--his frantic hand signals will do no good if you arn't looking.

43. When asking for requests or other phone calls from the audience, if you receive no response at first, prime the pump with a few phoney requests.

44. All tapes should be shelved and marked. Tapes left lying around will be erased in not properly identified.

45. Use headphones when talking over the air. This will greatly improve pronunciation and meter; tighten cues.

46. Keep the monitor on.

47. Don't play with the beeper or phones over the air.

48. Avoid annoying the Language Lab with high volumes. Keep the outer door open, the inner doors closed.

49. Project a cheerful, optimistic mood. This is your station and it is the greatest! Don't let your audience get the idea that there might be some better stations elsewhere! Follow these rules and we will always be way ahead of any competition.

AM TRANSMITTER CONTROL

To turn on the AM transmitters:

1) Push "On" button in Rack IV. This turns all the power supplies in the control rooms on.

2) Turn "AM Transmitter Switch" on. This switch is located on the control panel to the left of the console in the main control room. The green light over it should go on.

3) To provide audio to the transmitter, the limiter in rack II must be on. If the green pilot light on the limiter does not light, the limiter is not on. The power switch is located on the right hand side of the limiter. The left hand switch is a meter selector switch and has no effect on the output of the limiter.

To turn the transmitters off:

1) Turn off the limiters.

2) Turn off the AM Transmitter Switch.

3) If you are the last to use the studio for the day, turn off the power supplies by pushing the off button on the panel at the top of rack IV. Turn off the [illegible] leave the studio. It is [illegible] to [illegible] are locked, all the doors [illegible] windows, [illegible] and [illegible] the studio unlocked and unattended.

PRODUCTION OF MUSICAL SPOTS

How often have you found yourself listening to a sung commercial and been surprised to find that you are actually enjoying it or that it is a vast improvement over the usual spoken ID's or adds given on the same station? Ever since the famous beverage spots hit the air, radio has made extensive use of music. Music can create an image -- it can just as effectively create a mood.

One of the most effective uses of music on any radio station can be the musical ID. These are easy to make, yet many college radio stations which have the necessary equipment do not use them.

All musical productions take is a patient ear, a good tape-recorder in good repair, and a razor blade.

Musical spots, introductions, and ID's must be self-supporting and consistant. The force of self-support is usually derived from repetition. The listener can be trained to react to the introduction to a news program, sports program, ID, or PSA if it is repeated often enough and if it is always used in the same situation. This requires that all news reports start with the same introduction for each and every edition. The use of several introductions at random or in a complex and obscure schedule will only create confusion and then lack of interest in the listeners.

Consistance is much harder to obtain than self-support. Good taste and a good record library are both prerequsites--a musical spot can as easily bore or nauseate as it can please the ear. The introduction to a musical show should be consistant with the content of the show---use jazz intros to jazz shows; use bangos, brass, loud music for popular programs; use classical themes for classical shows. Instrumental music is easier to manipulate than is choral or vocal music. Whatever you use, make it distinctive. The music and the comments of the announcer should complement each other. Write copy so that the music and the vocal announcements do not compete for the listener attention--give each a chance. If the copy can complement the tempo of the music, so much the better. A little humor is often useful--a little!--be subtle, as the spot will probably be repeated often, and the obvious, once known, becomes boring.

If skilled writers are available, the home-produced singing jingle can be very effective. This requires skill and a local musical group, glee club, or band which is willing to help out. This is the most difficult form of the art, but it should be attempted by those who aspire to commercial productions and advertising jobs, as it most closely approximates their problems.

Piecing together the bits of music, bands, and talk so not even the most discerning listener can detect breaks or clicks is very difficult. Advance planning will reduce editing by cutting and permit electronic mixing and editing. Use the highest tape speeds available when editing, as this stretches the material out over the greatest length of tape and tends to make the exact position of splices less critical. Use a grease pen to mark the exact spot for cuts while moving the tape slowly over the tape heads. The Ampex PR-10 is the easiest KAL machine to use for this work. Remove the cut tape from the heads and splice it on the

block. Do not make cuts against the heads. Move the tape to the side or pull it down to the block and cut it. Use diagonal cuts for splices unless the break has to be very tight, as diagonal splices last longer, are stronger, and less noisy than vertical cuts. Use 1/4 inch splicing tape lengthwise for good splices. Do not use "Gibson Girl Splice Machines", as they give poor results and pull apart at bad moments.

Musical productions make the difference between the bright spot on the dial and just a frequency. They bring life and identity to good features and programs. Most of all they seek and hold listeners who will become fascinated with your sound.

*This article was translated into English from College Radio, April 5, 1964, page 26. Published by the Intercollegiate Broadcasting System, Bethlehem, Pennsylvania.

J. Welsh
Fall 1965

BULK TAPE ERASURE

Used magnetic recording tape may be reused if it is first "bulk erased". Although all tape recorders are equipped with erase heads (except for the cartridge tape recorders), bulk erasure of the tape ensures that the noise level will be low and that unwanted material remaining on a tape following a recorded passage will not be accidentally broadcast if the engineer fails to turn off the machine. If a tape which has not been bulk erased is recorded on a half trach machine and played bach on a full track machine, the unerased track will be reproduced as a noisy garble. If the tape has been properly erased, a half track recording can be played back on a full track machine without a significant increase in noise level from the unrecorded second track.

Use of the Eraser: The bulk erasing unit consists of an iron core and a coil of wire. When the coil is energized, a varying sixty cycle magnetic field is generated. This field will re-orient the magnetic crystals of the tape, changing their polarity 120 times per second. If a tape is placed on the machine, the field energized by pushing the switch, the tape slowly rotated and withdrawn from the field to an arms length while the button switch is still depressed, the crystals in the magnetic oxide will have their polarities and the intensities of their fields arranged in a random manner and all information will be erased from the tape. All that will remain will be a noise component which is usually 40db or more below the recording level.

DE-magnitizing Tools: The tape eraser can be used to de-magtitize tools, watches, screws, small parts, etc. in the same manner tapes are erased. Hold the item in the field close to the eraser and then slowly remove it. If the eraser is turned off with a magnetic material, such as a tape or a tool, in its field, the tope or tool will be left magnitized.

Caution:

A. Do not operate the eraser near (3 feet) any tape which you do not wish to de-magnitize.

B. Take off your watch before using the machine or you will magnetize it.

C. Tape erasers are not designed for continuous duty--do not use it for more that five minutes without giving it a two minute rest. Watch for signs of over heating.

Tape: 2.230
John Grilli
Spring 1966

PR-10 TAPE RECORDER OPERATION

Tape threading:

1. Turn on power. The light behind the meter glass should now be on.

2. Place the reel of tape on the left turntable so that the tape feeds counterclockwise off the bottom of the reel.

3. Place an empty take-up reel on the right turntable.

4. Lift the tape head cover to a vertical position so that the heads are visable.

5. Thread the tape clockwise over the top of the tape guide post (to the left of the head assembly), across the heads, and between the capstan and the capstan pressure roller. The capstan is the quarter inch steel rod which is connected to the motor. The pressure roller is the rubber wheel right under the capstan. Loop the tape under the take-up tension arm and fasten it to the take-up reel by winding two revolutions of tape around the hub of the reel.. This should lift the tension arm and the capstan motor should start.

Recorder Controls

1. Machine Controls:
   - Play: This button puts the tape deck in the play mode.
   - Rew: This button puts the tape machine in the rewind mode.
   - Fwd: This button puts the tape deck in the fast rewing mode.
   - Stop: This button will stop the tape from any of the above three modes and places the deck in the stop mode.
   - Rec: This button places the machine in the record mode. It must be pressed with the machine in the play mode or simultaneously with the play button. The "Safe-Record" switch must be in the Record position.

2 Electronics Controls:
   - Record Selector: This switch must be in the record position for the recorder to be in the record mode. The safe position is used to prevent accidental recording and erasure of the tape being played.
   - Output Selector: With the switch in the reproduce position, the electronics is set to play

signal being recorded. This switch also selects the input to the VU Meter. A tape can not be played back with this switch in the record position.

Equalization: This switch selects the record and playback equalization for the two tape speeds. The position of this switch should correspond to the tape speed.

Line Level: This control adjusts the line input level for recording. There is no output level control for general use.

Microphone Level: This control adjusts the microphone input level for recording.

VU Meter: The VU meter monitors the output level or the record level. For recording, the Output Selector is placed in the Record position and the VU Meter will read the record level. With the Output Selector in the reproduce position, the meter will read the playback level. See page 3.222 for details on VU Meters.

Record Light: This light will light only when the tape recorder is in the record mode.

Operation

1. Make sure the tension arm is raised and the Capstan motor has started.

2. Select tape speed with the tape speed plunger. Change speeds only when the capstan motor is running. On tape 3, push plunger in for 7 1/2ips; pull it out for 15 ips. On tape 4, push the plunger in for 3 3/4ips and pull it out for 7 1/2ips.

3. To play the threaded tape, close the head cover and press the Play button. Stop the tape by pressing the stop button.

4. To run the tape foreward or rewind it, lift the head cover and pull the tape lifter bar forward. Then press the appropriate button. To stop the tape, press the button for the opposite fast mode. When the tape has slowed, push the stop button.

Record Operation

1. Thread Tape as above.

2. Make sure the take-up tension arm is up and the capstan motor is running.

3. Select the input. The microphone input must be patched,

The line input may be patched or selected with the input selector system. The input selector has 12 positions, including an off, for selecting the 11 most used program sources, such as AM & FM Buses, Console outputs, and tape recorder outputs. Other sources must be patched. Patching automatically disconnects the input selector switch. When the input selector switch is not in use, leave it in the off position.

4. Place the Record-Safe selector in the Record position.

5. Place the output selector in the Record position.

6. Adjust the appropriate level control for a correct level on the recorder VU Meter. Meter readings in the red area indicate a high probability of serious distortion.

7. Close the head cover.

8. Press the Play and Record buttons simultaneously. The record light should light, indicating that the machine is in the record mode.

9. To stop the tape and take the machine out of the record mode, push the Stop button. To begin recording again, the Record button will have to be pushed again when the machine is started with the Play button.

10. When finished recording, put the Output Selector in the reproduce position, the Input Selector in the off position, and the Record-Safe switch to the Safe position.

Remote Control Operation:

1. Place the Remote Control Selector switch (a rotary switch located next to the input selector) in the position corresponding to the desired remote location. The three positions are as follows:

   STUDIO A and LOCAL
   LOCAL ONLY
   CONTROL ROOM and LOCAL

2. Operation is as shown above. See page 2.242 for information on operation of the remote tape controls.

3. Important: Do Not Switch the Remote Control Selector While the Machine is in Operation---It Will Stop!

"CREATIVE RADIO"

by James Dunbar, Program Director, KGO
* A talk given at IBS conference, spring 1965

"The main reason for choosing broadcasting as a career is that it is fun. If the broadcaster loses sight of this fact and begins to look at his job as work, the quality of the program will degenerate into mediocrity. The goal of the programmer should be to create a program which shows some sort of originality. In order to have value it must be lifted above the ordinary.

"KGO has tried to achieve dynamic programming by basing its format on the "talk program". The station devotes eight hours and forty minutes of its day to news and another nine hours to telephone talk programs. It decided to put so much time in non-musical programs after an investigation of the other types of stations in the area. The investigation disclosed that most of them ran on a format consisting strictly of music. Those that did deal with talk-type programs did not do a good job. KGO also discovered that CBS stations using formats based on talk programs were doing very well. Since none of the local stations seemed to be communicating with their audiences, KGO decided to try the talk format. At this moment the station considers its programming successful. In capturing approximately 11 percent of the market, it has succeeded in reaching the public.

"There are two types of philosophy that can be used in putting on a telephone program. The first is to talk down to the audience by assuming that the person calling in does not know as much as the announcer about the subject under discussion. It is also possible to bring in experts to talk to the listeners. The other philosophy that can be used is based on the idea that everyone today is "expertised" to death--that is, the individual is flooded with facts and interpretations on almost every subject, yet rarely is given the opportunity to voice his own opinion. This is the assumption on which KGO operates. The station feels that it is more interesting to hear what the individual thinks, even if his views are mistaken, rather than to place authorities in a position to lecture to him. At times, however, this does lead to programs in which discussion is conducted on a rather low level. Because of this, the speaker is not entirely satisfied with the present method of conducting this type of program.

"The most important single factor in determining the quality of any given program is the announcer. He is the individual who must relate to the audience. An announcer can be basically untalented and still be successful in his audience is sympathetic towards him. His image determines whether the program will be a success. This applies especially to telephone talk programs. It is disasterous for the announcer if the audience sees him as pitted against the listener calling in to express an opinion. The announcer is equally important in other types of programming. The character of a rock & roll show, for instance, can change drastically if the announcer sees fit to talk to his audience, rather than scream into the microphone at ninty words per minute. The announcer's position in the field of public affairs, however, is slightly different. Here it is necessary to plan original

programming rather than depend on the announcer to present it in an interesting fashion. One example of an interesting and original program, being planned by KGO, is the idea of taking three different men of the Jewish, Catholic, and Protestant faiths, and requesting listeners to call and ask about their political opinions on such issues as civil rights in relation to their religions. This gives the audience both an interesting presentation of various views and also some of the reasons for them. In doing this, the program is performing a public service which is more valuable than presenting straight factual material. It presents ideas in a different manner than any other media.

"Radio has changed in the last ten years, in that more stations are trying to achieve excellence than catering exclusively to those listeners who prefer mediocrity. Hopefully, the trend toward more imaginative programming will continue. At this moment, the talk program is one of the most important new concepts. Although the approach is exciting, there are problems connected. One of the biggest of these problems concerns the restrictions placed of the station by the "fairness doctrine" and the "equal time" provision of the FCC. These provisions are, in theory, extremely laudable. In practice, however, they can hinder the program without fullfulling their function. The first limits the freedom of the announcer to state his opinions, due to the danger of law suits. He is forced to tone down his comments, even though this decreases the amount of stimulating discussion. The second provision is unreasonable because, if a station wishes to schedule talks by leading candidates for a local election, for example, it must also give equal time to all other candidates, no matter what their importance or what they have to say. Instead of creating interest, this merely bores the audience while serving little or no purpose.

"One of the most important problems for radio to overcome is the conflict between the manager, who is interested in the practical issue of economics, and the announcer, who is striving for an original approach to everything that goes out on the air. One of the unfortunate tendancies of managers today is to be interested exclusively in making a profit. Many have no interest in the audience or the program. Their thoughts are oriented completely to the economic side of radio. Unfortunately, the size of the audience does not always indicate a successful station financially. KGO, for example, is at the moment not a financial success because operating costs are $22,000 per week. Another station, which devotes its time entirely to "schmalz" music and has no audience to speak of, is financially successful because it can operate on about $30,000 per month. This rather disillusioning fact tends to lead management to advocate unimaginative programming over that which is creative and achieves excellence, if the former is cheaper to operate. In the future, the conflict between these two elements -- the programmer and the manager -- will have to be resolved if radio is to continue to advance."

PROGRAM NAMES

This is a list of names which have been used on KAL or on other college stations for programs. It is intended as a stimulation to the imaginations of those seeking names for their programs.

KALeidoscope
Jazz Beat
Adventures in Music
Down Beat
Classical Concert Hall
The Workshop (poetry)
Hootnany
Conversations With Myself
Musical Masterpieces
Focus
Podium (debate-lecture)
Show Time
Sandbox
Train to nowhere (folk)
Sounds of the City
Wandrin'
Public Affairs
Ranblin'
Musical Gateways
Now Hear This!
Noises and Stuff
The Man on the Street
Backalley Blues
Nightsounds
Inquiring Reporter
Twilight Serenade
Odds n' Ends
Prelude
Study Music
Folk Festival
Wipe-out
Pick of the Pops
Collage (not college)
Concert Hall
Spot Light
Hit-a-rama
Night Train
Hootnany Hall
College Forum
Meet the Faculty (interview)
Classic Jazz Show
Discovery
Music from Abroad
Play of the Week
Hit Parade
Take 5
Campus West
Flinthill Special (folk)
Sunday Samplings
The sport Shop
On The Road Again
Remember When
On The Bum (blues)
Our Gang
Showboat
Second Stream (blue)
Curtain Call
Cal Forum (debate-lecture)
Composer's Delight
Jazz in the Afternoon
Blowin' the Blues
Open Line (call in)
Duo-a-go-go
The Meetin' House
Aqua Regia Hour (smut)*
Malstrom (satire?)
Preview
Them Dirty Blues
Miscellany
Dinner Music
Viewpoint
Exploration
Sat. Night Dance Party
Night Cap
The Dug Out
Saturday Stomp
Hot Line
Wild Weekend
Roving Reporter
Serendipity
Merry-Go-Round
Documentary
Archives
The Spoken Word
Variety Hour
Wanderings
International Hour
Opera House
Sunrise Serenade
Opinion (call-in)

*Deceased

STATION IDENTIFICATION

To comply with FCC rules and regulations, a station identification must be given within two minutes of the hour and half hour during the broadcast day. Station policy requires that shows end and start on time and that the ID's on all programs using records be within 30 seconds of the hour and half hour. As a minimum, the FCC requires the station ID to include the CALL LETTERS and the LOCATION of the transmitter. During live concerts, sports events, lectures, etc. the ID must be given at the first break in the program that follows the hour or half hour. If you wish, station ID's may be given more frequently than the minimum required by the FCC. It is a good proctice to identify the station every fifteen minutes.

Sample station ID's:

THIS IS KAL, BERKELEY. (This is the minimum required information.)

THIS IS KAL, THE UNIVERSITY OF CALIFORNIA NON-COMMERCIAL STATION IN BERKELEY.

IN BERKELEY, THIS IS RADIO K-A-L.

AT 850 ON YOUR DIAL, THIS IS K-A-L.

THIS IS NON-COMMERCIAL RADIO K-A-L IN BERKELEY.

FOR MORE GREAT MUSIC AND UP TO THE MINUTE NEWS, STAY TUNED TO THIS STATION, K-A-L, BERKELEY.

THIS IS THE WORLD'S FASTEST GROWING COLLEGE RADIO STATION, RADIO K-A-L BERKELEY.

FOR THE BEST IN LISTENING ENJOYMENT, YOU ARE TUNED TO K-A-L IN BERKELEY.

STAY TUNED TO K-A-L, BERKELEY, FOR MORE MUSIC AND NEWS.

K-A-L, BERKELEY.

RECORD LIBRARY

Use: Records are catalogued within the following classifications:

KC	Classical Music
KF	Folk
KH	Humor
KJ	Jazz
KP	Popular vocal
KQ	Popular instrumental
KR	Religious
KS	Show and Sound Track
KT	Documentary and Readings

Records are filed from RIGHT to LEFT numerically within the above classifications.

Catalogue numbers may be found by use of the master Record Catalog which is kept in the studio. If you do not find a record under the first catagory you try, check related classifications.

Rules:

1. NO RECORDS ARE TO BE REMOVED FROM THE STUDIO AT ANY TIME.
2. Records must be refiled immediately following programs.
3. Records should be cleaned only with appropriate record cleaning cloth.
4. All LP records must be in appropriate jackets and paper liner envelopes when not in use. Do not stack records unless they are in their jackets. Extra paper envelopes are kept with the collection.
5. When records are replaced in cardboard jackets, the opening of the paper liner envelope should be at the top to prevent records from falling out of the jackets.
6. Don't handle records by grooved area.
7. Persons bringing their personal records into the studio should mark their names on them.
8. Requests for purchase of specific records for the station library should be written out and placed in the bottom right hand drawer of the studio desk.
9. Only KAL members may make dubs from KAL records.

PRE-RECORDED PROGRAMS

Several foreign governemnts and a number of American groups, societies, companies, and governmental agencies prepare complete programs for radio broadcast. These programs are available to all radio stations, including this one, usually just for the asking. The material ranges from armed forces recruiting for the Army, Navy, and Air Force to Soviet propaganda. Most productions are well done and contain good musical productions. With a little editing, even the worst of the Soviet material is airable. The advertising council and the Automobile associations, CARE, the Peace Corps, and similar groups also provide PSA's for broadcast.

A list of some of these groups is given below:

1.	Deutsche Welle 5 Koln, Bruderstrasse 1 Postfach 344 Germany	Free taped programs, good full length operas, news type programs---tape can be kept.
2.	Editor in Chief Radio Moscow Moscow USSR	Free, taped, full of propaganda but can be edited for the good music. Need not be returned.
3.	Radio Sweeden Swedish Broadcasting Corp. 1290 Ave. of the Americas NY, NY 10019	Taped, free, tapes must be returned.
4.	Radio Netherlands Netherlands Info. Office San Francisco, Calif.	Disks--good music, no propaganda.
5.	Time-Life Miss Margot Ayers Time, Inc. Rockerfeller Center NY, NY 10020	Tape, free, not to be returned. Commentaries and interviews.
6.	CBC International Service English Language Section Box 6000, Montreal, Canada	Disks, free, lots of good material, both music and documentary.
7.	German Information Service 410 Park Avenue NY, NY 10022	Taped programs. Probably same as Deutsche Welle.
8.	BBC Transcription Service Kensington House Richmann Way Shepherds Bush London W. 14, England	$25/year. $4/disk.
9.	Intercollegiate Broadcasting	Tapes for a fee.

LIGHT ON YOUR POCKET! Rough Rider LIGHTWEIGHT SPORT-COATS

FRATERNITIES AND CLUBS (Continued)

Delta Tau Delta 2425 Hillside	845-9047	Lambda Chi Alpha 1755 Leroy	845-9332	Phi Kappa Sigma 2320 Warring	845-9267
Delta Upsilon 2425 Warring	845-9492	Phi Delta Theta 2717 Hearst	845-9130	Phi Kappa Tau 2335 Piedmont	845-9082
Kappa Alpha 2425 Piedmont	845-9431	Phi Epsilon Pi 2412 Piedmont	845-9329	Phi Sigma Kappa 2312 Warring	845-9007
Kappa Delta Rho 2601 Le Conte	845-9322	Phi Gamma Delta 2395 Piedmont	845-9561	Pi Alpha Phi 2534 Warring	845-9305
Kappa Sigma 2400 Warring	845-9485	Phi Kappa Psi 2625 Hearst	845-9184	Pi Kappa Alpha 2324 Piedmont	845-9123

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2335 TELEGRAPH

REMOTE BROADCASTING

What You're Up Against: "A remote location is not a home away from home by any means. You have acoustic and equipment problems which are absent or permanently obviated at the studios. Sheer weight and bulk limit the amount of equipment which you have at your disposal; yet the requirements of quality are not lower. The variety and unpredictability of remote conditions forbid an SOP based on mere habit; thus, planning for a wide variety of possible situations is manditory in the resulting program is to be airable.

During the broadcast, your only connection with the studio will be one or more pairs of copper wires. Live remotes can be divided into two classes on the basis of line facilities."

One Way Line: The most primitive remote is the one way line. Here the engineer is physically restricted to transmission in one direction by reason of the amplifiers enroute. In such cases the remote will come in by timing, more specifically, by pre-arrangement and by your counting down to a studio engineer. An example of a situation like this is a remote broadcast of a football game from Stanford. No talk-back or cues can be sent from the studio over this line due to the coils and amplifiers on the line. By preparation of schedules in advance and by occasional toll telephone calls to the studio, very good coordination can be achieved. A two way line could be ordered from the phone company, but the cost would be twice the $30.00 cost of the one way line.

Two Way Lines: A two way local line involves still just two wires, but since they are continuous (no amplifiers or coils), they offer a tremendously advantageous flexibility. First of all, they allow the program to be fed to the remote crew to allow them to hear the program preceding and improve cueing and coordination. In addition, two way communications can be carried out before, during, and after the remote broadcast by way of a simplex circuit talk-back system. This allows adjustments to be made in the schedule and permits the studio to retain control of starting time.

Simplex: A simplex circuit is composed of center-tapped transformers at both ends of the loop, connected in such a way that the simplexed device (relays, telephones, etc.) works both sides against ground. (See page 3.702 for a circuit). Since equal ammounts of power from the device travel along both sides of the loop in phase, they cancel out at the coil. Because one side of the simplex circuit is grounded, it picks up noise and hum. It is thus not suitable for program use.

It should be noted, however, that telco loops within the local areas are two way only as a matter of economy and simplicity of installation for telco. The station actually pays only for a one way line, thus, should the phone company insert line amplifiers, the station has no legal grounds for complaint. The use of amplifiers in the line not only makes them one way, but makes simplexed talk-back impossible. It here should also be stated that we pay only for voice range response--that some of these shorter lines are good to 10kc or better is accidental. Also, a slight imbalance in the lines will cause cross-talk between the simplexed communications and the program, thus a test should always be made before air time for cross-talk. Have the remote announcer or engineer talk over talk-back, but listen for him over program with the talk-back speaker in the studio off. Cross talk can be adjusted to inaudibility by proper balancing.

Remotes are facilitated in an extra pair is available for off the air monitor, for emergencies, or for communications. If the remote sight is within range of a transmitter, cues can be taken off the air.

Grounds: Under certain conditions (their existance must be determined empirically), a local ground on the remote console will reduce line noise. In addition, a local ground is necessary for the simplexed talk-back. The phone company supplies a ground gratis on the connecting block. The yellow wire is the ground, the red and green are program. Unfortunately, telco installers have a habit of inventing their own color codes or forgeting the ground. If two conductor drop cable has been used, there will be no ground. Water pipes make good grounds, steam lines are fair to poor as are electrical conduits. Conduits are subject to transients and may actually be several volts above ground. Grounds may be taken from anything that provided a low resistance path to damp earth. Your body may be used as an audio ground, but this won't work for simplex.

Headphones: Since there is no monitor speaker, the remote engineer must wear a headset continuously during the broadcast in order to receive cues and maintain balance between inputs and to check the quality of the signal, especially in regards to noise. Note that only high impedance phones are used for this application to avoid loading lines or overloading the console monitor system.

Time: Remote broadcasts are particularly dependent on time for smoothness. The remote engineer must know what time to start his feed, when to drop to the studio, and when to end. In this use, talk-back is vital. On a one way line, much careful prearrangement and comparisons of time standards is necessary. Network ID's should be timed to a prearranged length and a standard cue to the studio should be used. Drops to the studio should be avoided unless there is compelling reason which balances the chance of a foul up and the added tension on both ends.

In general, the producer should be located at a point where he is thoroughly cognizant of any deviation from the expected and where he can direct informedly the subsequent improvisations.

Failures: Most equipment failures on remotes are a result of either the temporary nature of the installation or the physical hardship on the equipment in carting it around. In the majority of cases, failures arising from these two causes can be alleviated given enough time. On remotes, the engineer must give himself enough time to find the source of the difficulty and time for himself or the phone company to repair it.

Failures in microphones and the remote amplifier are the provinces solely of the remote engineer. Failures in mikes are generally the result of jarring--ribbon mikes are particularly fragile--or a shorted or open mike cable or connector. Opens generally produce an excessive hum reading on the VU meter; shorts do not. Should both microphones (no remote crew should be sent out with less than two microphones) fail to operate, check to see that the cables are plugged in to the proper input jacks. It will not help if you plug into jack 3 and then turn up the gain on channel #1. If the VU meter does not move, check to see if you are getting power by throwing the talkback switch on. The pilot light should light. If it doesn't, check to see that some wise guy (like another radio station) has not unplugged your power cord. If there is power but no output, unplug the console output to see if the line is shorted. Put your phones across the line to see if audio is being fed out. If talk-back does not work and the studio does not receive you when you connect the oscillator directly to the line, the line is at fault. If it is a telco line, call the repair service. A tube failure is likely if the possibility of a shorted output has been eliminated by disconnecting from the line. Remember, grounding or isolating from ground, reversing the plug, switching inputs, and other maneuvers will probably reduce noise and hum level.

Failures beyond the remote console are usually opens or shorts resulting from poor connections at the terminals or an incorrect patch at the studio. You will notice that on most telco blocks there is a 10,000ohm resistor. This is so that telco can check the line for continuity. It also helps prevent some uninformed installer from thinking that he has found a free pair just because he doesn't hear dial tone and cutting into it. When setting up at any location for the first time, the line should be checked out first. Arrive well ahead of time. This fall station KTVU televised a Cal Basketball Game -- the picture was great, but the phone company didn't arrive to find out what happened to the audio until after the game. KTVU was out of it because they waited until 45 minutes before the game to set up and check their lines. On out of town remotes, telco will want to check levels with you so they can set their amplifiers; arreve well ahead of time. A call to the local test board is all that is necessary. On large jobs, where many stations participate, a telco man is usually on hand for trouble. On local jobs, the remote crew can check through with the station at any time.

Preparation: The remote engineer has a great deal to do before a remote can ever be aired. First he must find the line termination. Telco lines terminate on standard connecting blocks mounted on the baseboard or some equally inconspicuous place. KAL lines and TVO lines often terminate in either connecting blocks or on connon connectors. If patches have to be made through the Educational Television Office or Language Labs, these have to be seen to well ahead of the broadcast. If the producer or chief engineer has had the telco installer check with a specific person at the remote site for instructions, you will be able to find out easily where the block is. It will generally be marked with the station call letters and a circuit number.

Power: Find an AC outlet where your plug will not be pulled or kicked out by some careless passerby. Route cables in such a way that they don't trip people. Tie power cords to something solid near the plug to prevent their being kicked loose. We have lost large chunks of baseball games for this reason in the past.

Mike Placement: Mike placement is invariably a compromise. There is the physical limitation of the number of inputs to the remote console; you must compromise between background noise and the use of numerous mikes closeup with their resulting phase distortion and inbalance; there will be occasions when your mikes are in the way; sometimes they will have to be hidden in props or off-stage. One general rule is to use uni-directional mikes unless there is a particular reason for using some other pattern. Uni-directional mikes reduce echo and noise pickup. If you have an opportunity to attend a rehersal in the concert hall of a concert you are to broadcast, all the better; you can not only test your mike placement for balance, but you can time the compositions and get an idea of gain settings.

Set-Up: As soon as the remote engineer arrives on location, he should set up the remote console and start feeding signal down the line. KAL's portable transistorized oscillator is handy for this. In this way the operator in the studios will know that the system is operating and that the check in will occur at the prearranged time. In local broadcasts, the console should be set up and the talk-back headset plugged in to quickly establish communications. The check out with the studios will consist of level checks and possibly frequency response. The signal will be checked for cross-talk and general quality. A time check should also be made. Pots should be kept open on the remote console at all times so that the studio engineers have a constant check on the condition of line and set-up. The studio will monitor the line on audition before air time. Crews for remotes should avoid talking just before air time incase the studio picks up the remote a few seconds too early. There should also be no talking during drops for network ID's.

Gain: The remote engineer must ride gain for the whole system. Only he can properly anticipate peaks---if his meter pins, he can be sure that every meter in the system has also pined and that all of the transmitters are over modulating.

> "The technique of controling volume at originating points is based on one fairly obvious principle, namely, keeping the average volume as high as possible without having to reduce too many volume peaks and thereby sacrifice desired volume range.
>
> Responsibility for the actual volume conditions throughout the system ....thus attaches itself to the control operator at the program source. No substitute for this situation has been found, as attempts to compensate, at other points, for improper control at the originating point has been found by experience to lead to serious confusion and sometimes upset the coordinated operation of the system."
>
> ---NAB Engineering Handbook

PA Systems: It is frequently possible to feed off PA Systems for speaches, University Meetings, or concerts where the quality of the PA system meets broadcast standards--as in Pauley Ballroom. Care must be taken to see that no hum is fed into either system by virtue on their interconnection. It is a good practice to use an isolating transformer or amplifier between KAL and any external equipment.

Releases: The producer of any special event should be cretain that a release of broadcast rights to the material has been obtained in writing by the University. A standard form for release of broadcasting and recording rights is issued by the Chancellor's Office---a supply of these forms is kept in the KAL office. If another University of California department has obtained broadcast rights, KAL need not obtain separate authorization. Furthermore, unless a release of rights has been obtained, no KAL staff or equipment is to be used to record or help others record or broadcast the material. This is aimed at KPFA in particular, as they have a rather "hang loose" attidude about breaking rules for which KAL then gets screwed by the University. Material for which releases are required included concerts, speeches which are copyrighted, plays, talks, etc.

Conclusion: The secret of success lies as much as anywhere in arriving at the location in time to ascertain that some item has failed and to remedy the failure. Smoothness of production bears a direct relationship to the recognition of the limits of remote broadcasts and planning for the unexpected. The engineer can take nothing for granted, least of all, the situation he will find when he arrives on location. This distrust is just as much a part of controling remotes as riding gain.

REMOTE KIT CHECK LIST

Preparation for a remote broadcast should include consideration of the inclusion of material from this list. These items are usually kept together in the studio.

Remote Kit Suitcase
Remote Console
Remote Console Power Supply
Remote Console Power Cord
Talkback Headset.

Outlet Box and cord.
Extension Cords
Power Plug Adaptors.

Microphone cables, short (1 per mike)
Microphone cables, long
Spade lug to Cannon plug adaptors (male and female)
jumper wires
Male to Male Cannon Adaptor
Female to Female Cannon Adaptors

Microphones (at least two)
Floor type stands
Table top type stands
Lavilliere mike clip

Transformer, six hundred ohm isolation.
Transformer, bridging
Transformers, Rep D1620 or 111C

Oscillator
screw driver
Wire Strippers
Soldering Gun and solder.

Pencils and Pens
Scratch Pads
Release forms
Press books and sports speed charts
Binoculars
A poster or banner with KAL call letters on it.

Uher 4000S Tape recorders
take up reel
tape
Uher microphone

J. Welsh
Fall 1965

REMOTE KIT, SPORTS

___Remote Kit Suitcase

___Remote console

___Remote console power supply

___Remote consloe power cord

___Power extension cord

___Power plug adaptors

___Microphones, two

___Microphone cables, short, two

___Adaptor, spade lug to female cannon plug

___Microphone stands, desk type, two

___Screw driver

___Pencils and pens

___Scratch pads

___Press books and speed charts

___Binoculars

___Microphone cable, long, two

___Press passes

___Wind socks for microphones

NOTES: 1) Check ahead to time to see if there will be any competition for space with television or other radio stations. Arrive early.

2) If tables or chairs are not available, they will have to be obtained from the stidio or from janitors.

3) Check to see that the studio has connected the remote line and is monitoring it before you leave for the remote.

4) Check out the remote line well before game time.

REMOTE LINES

Remote broadcasts from many of the buildings on the UC Berkeley Campus are possible through existing audio lines. Where a connection does not exist, an event may be either recorded with a portable recorder (The Uher 4000S), or if important enough to do live, a line can be installed. A one time local line can be installed for a week for a $10.00 fee plus $1.75 per quarter mile for the first quarter and $.63 for each additional quarter. If the line is kept for a month, the rate is $3.50 for the first quarter plus $1.25 for each additional quarter mile. These lines are ordered from the Telephone Company Broadcast Services Office in San Francisco. They like at least a week's notice, but in emergenties, they will put one in on a day's notice--don't overdo this though, as ther good will is important.

Existing Lines: Existing lines may be divided into three catagories by controling agency. All of the lines on the compus are controled by Radio KAL, The Educational Television Office, or by the Language Laboratory.

KAL Lines: All of KAL's inter-building lines are leased from the telephone company. The list varies, so persons planning remotes should check with the Engineering Department or the Manager. The list usually includes the following buildings (note that the stadium line is in only during Football season):

Harmon Gymnasium
Student Office Building
Student Union Building
Memorial Stadium
Clint Evans Daimond

Language Lab: The Language Lab has direct lines to the following areas:

Little Theatre
Educational Television Control Room (B-55 Dw)
Rooms 145 and 155 Dwinelle Hall
Greek Theatre
Morrison and Hertz Halls
KPFA
Student Union (shared with KAL)
Radio KAL (2 lines)

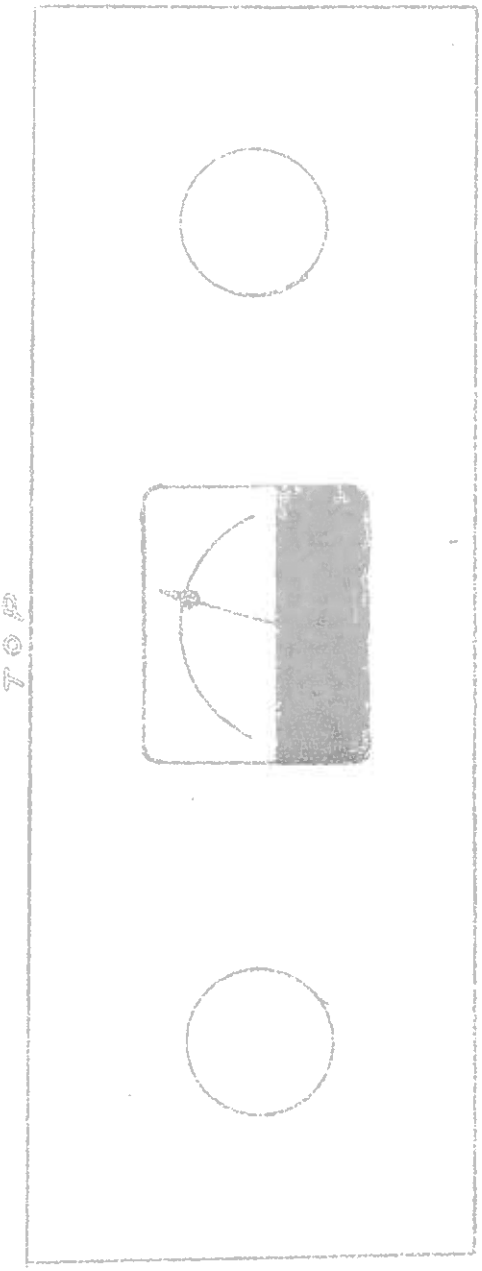
TVO: The Television Office has lines to the following areas:

Wheeler Hall
145 and 155 Dwinelle
Life Science Building
Haviland Hall
California Hall

Patching arrangements for these lines should be made well in advance.

METER PANEL

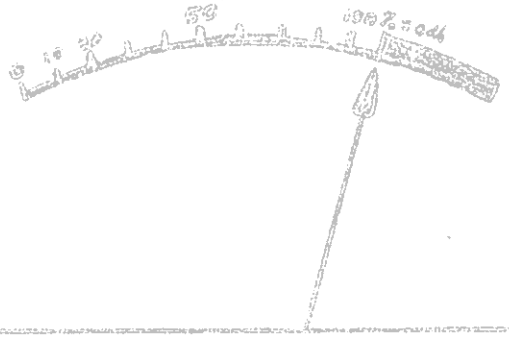
A meter panel on which most of the important audio circuits appear is located in rack 1 (the patch panel rack). An eighteen position selector switch on the right edge of the meter allows the operator to select the circuit to be measured. The left hand switch sets the scale of the meter. With this switch, zero on the meter can me made to correspond to 0, +4, +8, +12, or +20 decibels (db), where 0db corresponds to a power of one milliwatt through a 600 ohm load. Note that the normal range for the consoles and the tape recorder meters is zero = +4db. The frequency response of the meter is flat from 20 cps to well over 25kc. The ballistic properties of the needle are as required by the FCC for monitoring of broadcast audio levels. KAL equipment is adjusted so that a level of +4db in any of the critical circuits corresponds to 100% modulation of our transmitters. Program levels should be adjusted so that the meters register between +3 and 0, with 0 = +4db (which is the normal setting for the console meter).



Important positions:

#5	Left multiple
#7	Right multiple
#9	FM Program Bus
#10	AM Program Bus
#11	FM Transmitter Bus
#12	AM Transmitter Bus

Meter Faces: The scale of a typical VU meter is shown below. Note that the region to the right of the 0 = 100% mark corresponds to overmodulation.



CONSTRUCTION PRACTICES - HUM

Hum in audio equipment or transmitters is usually the result of introduction of power line voltages or their harmonics into audio circuits. In some cases hum is caused by low frequency oscillation called "motorboating." Hum can usually be eliminated or prevented by following the following principles of construction.

If hum stops instantly when the power is disconnected, before the DC voltages have dropped far enough to stop amplification, hum is the result of the introduction of power line voltages into the circuits.

1. Insufficient filtering in the DC power supplies to the transistors or tubes will impose a ripple on the audio signal. This is most noticeable in low level stages. Batery operation of a transisterized unit is a good test for power line hum--if the unit is without hum on batteries, the AC supply is to blame.

2. The center-taps of the heater windings of the power transformer should be grounded. If there is no center-tap, a pot of about ten ohms resistance may be connected across the heater line. The center movable tap should be grounded and the pot adjusted for minimum hum in the amplifier output.

3. All wires carring AC heaters or power should be twisted to reduce magnetic fields. Shielding of the twisted heater or power leads will reduce electrostatic as well as magnetic radiation or pickup.

4. Power wires should be run near the chassis in order to keep them in the influence of its ground plane. AC lines and audio lines should cross only at right angles and should not be run adjacent to each other.

5. All chassis should be grounded, unless, as in some radios, one side of the power line is connected to the chassis. In this case experiment with reversing the plug. Several units in a system should have the same ground and each should have only one connecting path to the ground. Shields of cables should be grounded at one end only in audio work. Ground loops must be avoided. All components of a single stage should be returned to the same spot on the chassis. A ground bus-bar is good practice in audio work.

6. The use of DC filiments in tube pre-amps or the use of batteries in transistorized equipment is a brute-force type of last resort, but it works when all else fails.

7. Shielded audio transformers and cased power transformers help reduce magnetic induction of hum. Power and audio transformers should be well separated.

8. The outer foil of coupling capacitors should be connected to the low impedance part of the circuit, such as plates rather than grids; collectors rather than bases.

9. Noise generators should be attacked. Filters should be placed on noisey motors and lights. Capacitors or contact protectors across switches cut pops and noise from the power lines.

10. Transmitter hum in carrier current installations can be caused by violations of any of the above rules or by any of several spacialized problems. The transmitter will be hum modulated if ripple current is present on the plate of the final class C amplifier. This ripple can come from a poor power supply or from leakage through the coupling equipment attached to the transmitter tank circuit. Tuned coupling links, faraday shields, and good capacitors of the proper value usually eliminate these problems. A good ground can be critical in these problems, as it often is for audio work. Hum can also be caused in a receiver from radiation from the transmitter oscillator or driver stages. A receiver will usually hum if too strong a signal is applied to it. The solution here is to shield the transmitter, put a filter on the receiver, or move it. The last important cause is non-linear devices on the power lines or corroded connections which cause modulation of the carrier by the line voltage. Trial and error is the only practical approach.

Fall 1965

AM TRANSMITTER CONTROL

Radio KAL transmitters are remotely controlled from the studio over the same leased telephone lines which feed audio signal to them. These lines are leased from the telephone company and consist of one continuous twisted pair of wire from the studio to the transmitter site. The wires should have equal resistance and neither should be grounded. There should be no loading coils, amplifiers or repeat coils between the studio and the transmitter. If the phone company leaves loading coils or repeat coils on the line, the frequency response will deteriorate and simplex control of the transmitters may not be possible.

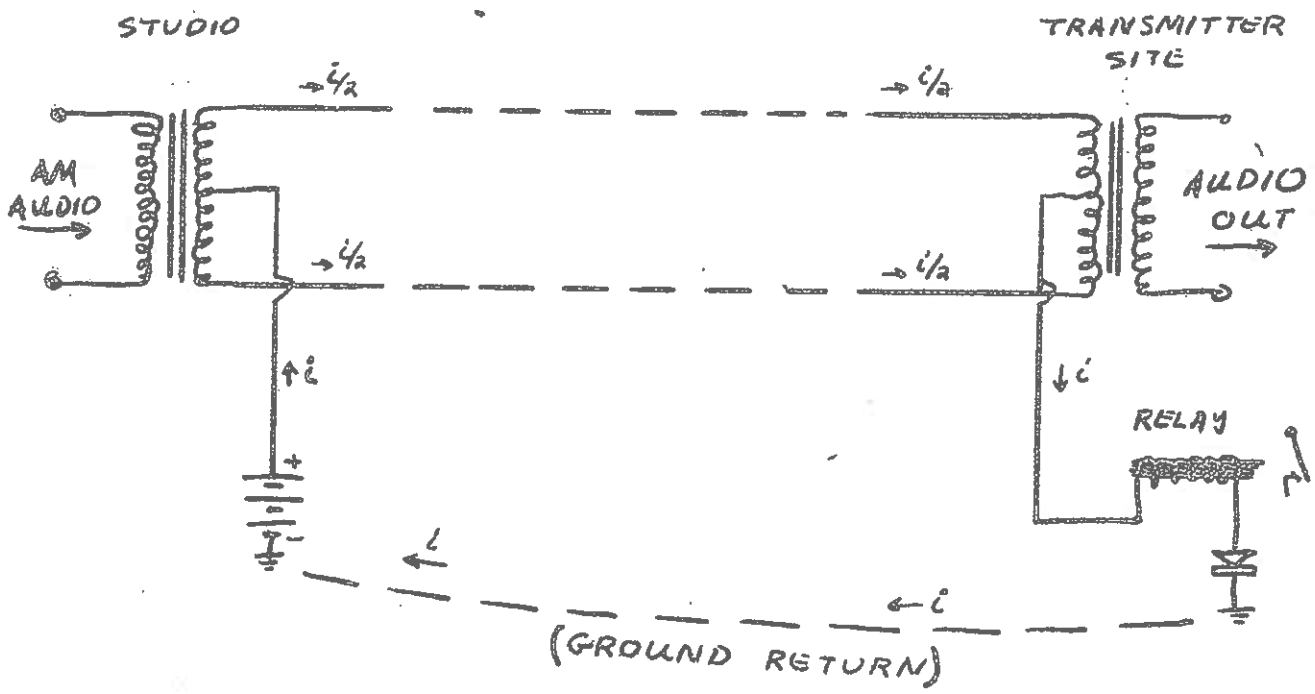
The leased lines cost $3.50 for the first quarter mile per month and $1.75 for each quarter mile thereafter per month. There is a ten dollar installation fee and there is no provision for summer hold or temporary disconnect without the full fee for re-instalation. If a line is kept for only one week, the instalation fee is the same, but the per quarter mile charge is halved.

Leased lines are ordered from "broadcast services" in San Francisco. Our contact man there is Ed Paulson (986-5216).

Relay control voltage is fed into the center-tap of the line amplifier transformer. The current is split equally between both of the lines and flux cancelation prevents noise or clicks from the control system from appearing on the program channel. This circuit is shown on the next page.

J. Welsh
Fall 1965

SIMPLEX CIRCUIT



The transformers used should have 600 ohm windings on the line side. The transmitter side may be either 600 ohm or high impedance. Suitable transformers (as to frequency response and current ratings) include the following:

REP D-1620 --	Western Electric
REP 173	Western Electric
REP 111C	Western Electric
A-10	UTC
A-11	UTC
A-20	UTC
A-21	UTC
LS-33	UTC
LS-30	UTC

Transformer specs: 50ma balanced DC in 600 ohm winding.
± 20db without distortion.
40cps - 15kc ± or - 2 db. (min)
Sealed case.

TRANSMITTER FAILURE

If a KAL AM Transmitter is reproted out of service, the following proceedure should be followed by the KAL engineer on duty:

1. Is the console puting out audio? Put the meter switch in the program position. It should move. If not, check master gain, gain controls and switches for each mixer. Meter range switch should be on ¼ db. range. If no audio is indicated and nothing is heard in the monitor (with the mike switch off), the console is probably at fault. Switch into teh other control room.

2. If console is working, check limiter to see that it has an indication of either signal output or limiting action, depending on switch position. The green pilot light should glow; the power switch should be up.

3. Is the AM transmitter switch on? The green pilot light on the control panel in teh main Control Room should be on.

4. Check patching (or drop take if operating) The console output should feed into the limiter, the limiter output into the AM Transmitter bus. Switch the meter on the meter panel to the AM transmitter bus. There should be a signal with peak readings at +4 db. Check the meter range switch.

5. Check the line amplifier panel for the individual control switches. They should be up.

6. Is the relay power supply working? Check circuit breakers and fuses in the power rack. If nothing (including tape recorders and turntables) works, push the "On" button in the power supply rack. If the green pilot light is still off, the circuit breaker on the panel in B-27 is out. If you can't find a language lab employee to reset it, call the Chief Engineer.

7. If trouble persists, call the chief engineer or one of his assistants (their telephone numbers are listed on the console in the main control room).

CARRIER CURRENT TRANSMISSIONS

Carrier current stations operate under Part 15 of the Rules and Regulations of the Federal Communications Commission. The FCC does not require notification of a station's existance provided that it complies with part 15.7 of the Rules and Regualtions on restricted radiation devices. See page 3.975 for details on these rules. There are currently no other regulations which carrier current stations are expected to observe, however, most stations observe the rules and regulations for commercial broadcast stations. This compliance results in a professional sounding station, a reduction in sloppy operation, and a better chance of survival of and FCC investigations of the station's operations.

Because carrier current stations cannot radiate over a considerable distance, the radio frequency energy must be delivered to each building where it is desired. After the signal is in the building, short distance radiation is used to get the signal into the radios. Various devices are used for a "radiator", the most common being power lines. Others are steam pipes, gas pipes, a loop antenna around the building, or other conductors in the building.

In theory, the AC wiring of the building constitutes a shielded transmission line, which should radiate very little. However, in practice, some radiation is experienced from the building wiring itself, from the transmission line feeding the building, and from the AC wiring entering the building. There are other defects as well. Multi-point radiation produces radiation standing waves within the building. This results in three dimensional areas of poor reception. Non-linear devices on the lines (e.g., some phonograph motors, corroded splices in wiring, etc.) produce intermittent 60 cps modulation of the carrier, The RF impedance of the AC lines fluctuates wildly from hour to hour and from week to week. Peculiar building configurations produce random areas of rienforcement and cancellation, rendering compliance with FCC Rules difficult. Nevertheless, this method of signal distrubution is currently in use in hundreds of colleges and universities today.

There are two major methods for getting the radio frequency energy into the buildings where it is desired. Method one is to have a main (central) transmitter and run coaxial cables with RF signal to each building. Method two is to have separate transmitters for each building. A modification of method one is to feed low level RF energy to buildings and use linear RF amplifiers. A variation of method two is the use of a master oscillator to drive each of several transmitters.

The advantages of method one are cost and lack of interference (beating) between the transmitters. The major disadvantage of this method is that coaxial cable must be run to the various buildings. The advantages of method two are that audio lines can be rented relatively inexpensively from the telephone company, lines can be installed more easily than coaxial cable, and the output power can be adjusted for any size building. The disadvantages are the continuous costs of rented lines and the posibility of beating between various transmitters which are close together, unless they are carefully adjusted. Central oscillator-frequency multiplier systems have been developed to maintain a single RF frequency with a number of transmitters (KZSU uses such a system).

FCC RULES ON CARRIER CURRENT

Part 15: Campus limited "carrier current" radio stations fall under part 15 of the rules and regulations of the Federal Communications Commission. This part of the rules requires that "restricted radiation devices" cause no harmful interference with licensed radio services. This means that the carrier and modulation must be restricted to those parts of the AM band which are not occupied and that the radiation must be restricted to the immediate vacinity of the buildings in which the transmitters are installed.

The FCC further requires that all station equipment must be available for inspection on demand and that any information requested by the Commission be promptly supplied. It is absolutely neccessary for the station to keep an accurate up-to-date log, as the FCC usually is interested in information not otherwise available. It has been the experience of many college unlicensed stations that a business-like log is the key factor in an FCC examiner's decision as to whether or not a station guilty of a violation will be permitted to continue operation.

Field Strength: For a station operating on 850kilocycles (as we do), the following conditions must be met:

1) Minimum power possible shall be used.

2) Field strength at 185ft. will not exceed 15 microvolts/meter. Distance is measured from the nearest radiator, such as the transmitter, antenna if any, and all power lines on the transmitter side of the building power transformer. A signal strength of 15 microvolts/meter will just bearly operate a good portable radio.

3) That all transmission equipment be in conformity with good engineering practice, i.e. crystal control, no hum, adequate modulation, no fire hazzards, etc.

Library: The complete rules and regulations are kept in the University Library's Document Room and may be used there. Copies are also available from the FCC at a small cost.

Professional Operation: It is advisable to operate the station in conformity to the rules governing commercial (licensed) AM broadcasting stations--the FCC likes professional operation and is noted for putting sloppy college radio stations off the air (ask KZSU at Stanford about this).

YOU'RE RIGHT FOR ANY OCCASION IN Rough Rider SPORT COATS & SLACKS

SORORITIES AND CLUBS

Alpha Chi Omega 2313 Warring	845-9059	Alpha Phi 2830 Bancroft	845-9044
Alpha Delta Pi 2400 Piedmont	845-9469	Alpha Xi Delta 2833 Bancroft	845-9556
Alpha Epsilon Phi 2401 Piedmont	845-9421	Chi Omega 2421 Piedmont	845-9166
Alpha Gamma Delta 2424 Warring	845-9061	Delta Delta Delta 2300 Warring	845-9318
*Alpha Kappa Alpha 1706 Derby Street	848-8025	Delta Gamma 2710 Channing	845-9520
Alpha Omicron Pi Annex 2311 Prospect	845-9243	Delta Phi Epsilon 2455 Prospect	845-9127
2301 Prospect	845-9550		

GANT
SHIRTMAKERS

The gentleman seeking a more trimly contoured shirt will be delighted by our newest design. Fine cotton oxford has been tailored with utmost finesse to provide slimmer fit. And of course, there's an authentically flared button-down collar to maintain the fastidious look you require. $6.50

(No charge for mailing.)

Jay Briggs
San Francisco

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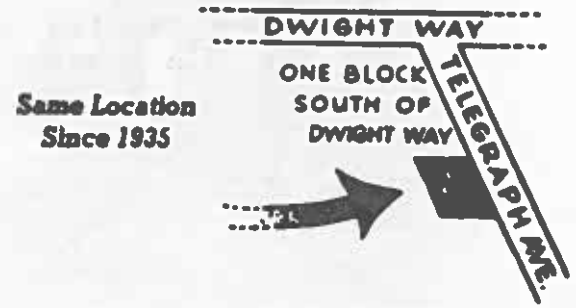
BERKELEY



Same Location Since 1935

THornwall 3-5026

UNIVERSITY OF CALIFORNIA RADIO NETWORK STATIONS

KAL Eshleman Hall, University of California, Berkeley
Transmission: Carrier Current.
Staff Size: 100
Organization: See page 1.006

KCSB University of California, Santa Barbara
Transmission: Carrier Current, 770kc.
FM, 10 watts, 91.1mc.
Staff size: 60
Station Position: Student owned and operated under University supervision. Manager selected by student-administration board.
Chain of Command: Manager to Program Director to Daily Manager to Announcer. News and Public Affairs under Manager.
Staff Division: Programming-60%, News - 15%, Engin.-5% P&PR-10%, Secretarial-5%, Other-5%.
Program Guide: Daily program guide in campus paper, also semester guide with block schedule.
Programming Division: Music-61 hours, News-3hrs., Public affairs - 3hrs, Other-5hrs. Total: 70hrs.
Live Broadcasts: Mostly local and campus news, very little on lectures and concerts.

KCD University of California, Davis
Transmission: Carrier Current to dorms.
Facilities: One small studio and one small control room located in basement of dorm.. Space in the student has been allocated. They have a Spartamatic Console unit which includes two turntables. They are weak in tape recorders. Small record library.
Network: KCD is by far the most gung-ho network station.

KUCW University of California, Los Angeles
Transmission: Carrier Current to dorms.
Facilities: Studios located in converted music rooms in the UCLA Student Union.

KUCR University of California, Riverside
Transmission: FM license applied for in Fall, 1965.
Facilities: $10,000 received from Regents to purchase complete equipment for studio.

COLLEGE RADIO STATIONS - NON-UCRN

KCSC Chico State, Chico, California
Transmission: Carrier Current - 1570kc.
Staff size: 50
Commercial broadcasting on carrier current.
Station Position: Program content determined by students, has faculty advisor, student activity credit given.
Staff Division: Programming - 60%, News - 20%, Engin.-10%, other - 10%.
Program guide; issued weekly.
Programming: Music - 55hrs, News 5hrs., lectures - 14hrs., Other - 25hrs. Total 99hrs.
Live broadcasts: forums, concerts, talks, etc.

KXLU Loyola University of Los Angeles
Transmission: FM, 89.1 mc, 710 watts
Staff size: 15
Position: Responsible to University for all program and editorial policy and content.
Staff Division: Programming - 55%, News -22%, Engin.-22%.
Programming: Music-23hrs, News - 2hrs., Other,2hrs. Total: 27 hrs.
Live broadcasts: Very few.

KUSF University of San Francisco
Staff size: 25
Programming: Music-35hrs, Total-35hrs.
Transmission: Carrier Current, 880kcs.
Sponsorship: Commercial Broadcasting.

KLC Lewis and Clark College, Portland, Oregon
Transmission: Carrier current, 680kc.
Station Position: a student activity with activity credit given. Staff sets program and editorial policy. Has station advisor.
Staff Division: Program-50%, News - 30%, Engin.-3%, Other-17%.
Staff size: 70
Program guide: Issued twice per semester.
Program Division: Music-80hrs., News-20hrs., Lectures and Arts-10hrs. Total-32hrs.

KUNR University of Nevada, Reno, Nevada
Transmission: 570kc AM, 88.1 10watt FM
Staff: 10

KRTG San Francisco State College
Transmission: AM carrier current, 880kc.
Staff Size: 70
Station position: Station work offered as a credit course. Station staff determines policy. They have a faculty advisor.
Conference: Sponsor a banquet and conference each Spring.
Facilities: Equipment owned by college. Two small rooms (a studio and control room) plus use of larger studio and facilities of college. SF State has the most lavish Radio and TV studio facilities in Northern California. There TV facilities (with no on the air use) are the best in Northern California including commercial stations.
Program: Music-15hrs, news-7hrs, other-10hrs. Total-32hrs.
Chain of Command: Manager over Program Director, Technical, Commercial, Executive Secretary, Promotions.

KZSU Stanford University
Transmission: AM; carrier current, 880kcs.
FM, 10 watts, 90.1 mcs
Staff size: 150
Station position: Owned and bperated by students under communications department of the University. Activity credits given. Students determine all policy, elect all officers.
Staff Division: Program 35%, News-15%, Engineering- 35%, P&PR-10%, Secretarial- 5%. Engineering includes board operators.
Program Guide- Every two weeks, includes adds.
Sponsorship: Commercials on AM and in guide.
Programming Division: Music-71hrs., News- 4hrs., Arts & Lectures-6hrs. Total-81 hrs.
Networks: Red-hot for the IBS and tape exchange.
Equipment: One control room and announce booth of their own plus a large studio and control room owned by the communication dept. Well equipped with respect to audio equipment and tape recorders. A large record library. Moseley 10 watt FM transmitter.

KHSC Humboldt State College, Arcata, California
Transmission: 90.5Mcs. FM. 10 watt.

KSMC Saint Mary's College, California, 94575
Transmission: 880kc carrier current.
Staff: 18
Sponsorship: Commercial

KSPC Pomona College, Clairmont, California
FM 88.7 Mcs. 3000watts.
Staff: 115
Program: 42hours per week.

KRPC Reed College, Portland, Oregon

KMJC Modesto Junior College, Modesto, California

KEDC San Fernando State College, California

KCUR University of Redlands, California

KBCO Bethany Bible College, Santa Cruz, California

KFSR Fresno State College, Fresno 26, Calif.

KSJS San Jose State College, San Jose, California

NETWORK PROGRAMS, UCRN

Network News: Arrange with each of the UC Campus stations to prepare 5 minutes of campus news covering the past week's events and future events on their campuses, and have them read it over the phone. If the other stations have a sound proof area it is just as easy for them to read their news live over the phone than to record it earlier and feed from a tape recorder. Reports from the other campuses are recorded in KAL Master control from the phone lines and edited for broadcast to the other campuses and over KAL. Be sure to arrange for a standard opening and close for each segment, such as: "This is _____ at _____ campus of the University of California, reporting for the UC Radio Network.

Prepare an opening and close to be put on each complete program. It should include information that the program originates on the various campuses of UC---put in a good fan-fare.

Record the standard program opening onto the master tape. Record each segment as called in. Arrange with each station to call Berkeley at intervals of about ten minutes starting about 6pm. Have the other stations give a level test before actually reading the news. When all is set for the actual recording, have the announcer count backwards from ten out loud and then begin reading. Don't leave any breaks between segments. After all segments have been recorded, put the standard closing on the tape. Arrange with each station the time for playback of the completed program to them. The number of stations that can be fed is one less than the number of KAL phone lines.

General Notes:

1. Each program should begin and end with the statement: "This is the University of California Radio Network." If the program is not special for the UCRN, then: "This is the Pacific College Radio Network."
2. If the program is to run more than 30 minutes, then allow 10 seconds for station IDs every 30 minutes. The proper method for leading up to the break so that the Net stations can pick it up is to say: "...we now pause 10 seconds for station identification, this is the University of California Radio Network." Pause 12 seconds---do not feed KAL ID's to the Net. Do not identify KAL during the body of the program.
3. When receiving, arrange for ID's as in #2 above.
4. Dont use beeps when feeding or receiving.
5. TRY TO ARRANGE AS MUCH NETWORK EXCHANGE AS POSSIBLE, TO ADD INTEREST TO PROGRAMS AND INCREASE SKILLS.

A-GO-GO FOR THE SLIM ONES . . . NEW SLACKS BY Rough Rider

APPROVED LIVING ACCOMMODATIONS FOR MEN

Barrington Hall 2315 Dwight Way	843-6551	Deutsch Hall 2650 Durant	841-6313	Priestley Hall 2400 Durant	849-1220
Bowles Hall Campus	848-4010	Ehrman Hall 2650 Haste	841-7622	Putnam Hall 2650 Durant	841-6313
Campus Lodge 1519 Arch Street	849-0760	Griffiths Hall 2650 Haste	841-7622	Ridge House 2420 Ridge Road	845-9359
Campus Lodge Annex 1515 Arch Street	848-9557	Herrick Manor 2732 Durant	841-6714	Smyth Hall 2939 Dwight Way	845-4780
Cloyne Court 2600 Ridge	845-4710	Kidd Hall 2562 Le Conte	848-9465	Stratford Hall 2520 Durant	843-7292
		Norton Hall 2400 Durant	849-1220		

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Both new and used
Row on Row of Paperbacks

SUPPLIES

Whatever you need in paper, in lab, art and engineering supplies—it's here—at the RIGHT PRICE!

SHOP IN "CAL CORNER"

Buy the "Cal" sweatshirts you need here along with "Cal" animals, pennants and mugs — Favorite with all UC Students.

STORE

STUDENT UNION PLAZA — RIGHT ON CAMPUS

DAILY PROCEEDURE FOR NEWSCASTERS

1. Begin gathering news from the sources of information no later than 3 o'clock.

2. Check the following sources:
   Public Information Office
   Publicity and Public Relations
   KAL News Office boxes
   Beat Sheets
   Daily Cal AP Newswire
   Sources listed on page 5.110 of this book for further information. Use the telephone vigorously, it is your greatest ally.

3. Include a brief weather rep ort in each newscast. Call WE 6-1111.

4. Read the Daily Cal every day to keep up with what is going on on the campus. Don't quote anything without checking it out-- they make plenty of errors. Follow up on their stories-- see what new information you can find out. Read over KAL News stories from the previous day.

5. Include taped reports in the news for variety.

6. Each newscast should be AT LEAST THREE AND NO MORE THAN FIVE minutes long!

7. Follow this format:
   Intro: "This is _____, Radio KAL News."
   Campus HEADLINES
   International and national news
   State and local news
   Campus news
   News of other campuses (optional)
   Weather
   End: "This has been _____, Radio KAL news."

8. Headlines should not be more than two short sentences long.

9. Campus news should recieve the most attention.

10. Type the copy for each campus story on a separate sheet.

11. File each day's copy in the appropriate folder. Throw out the material for one week ago.

12. Read clearly and briskly. Avoid "quote" and "unquote".

13. On days when you are not broadcasting, write up stories from your beat and file them in the appropriate box in the office. If you witness a newsworthy event, report it. For urgent stories, call the studio and have the engineer record a two minute (or less) report or put you on live. End by saying: "This is _____ reporting from _____for KAL news.

IBS
Spring 1965

NEWS TIPS

This is a summary of ideas offered in a discussion at the Spring 1965 IBS West Coast Conference. News staffs from several college radio stations participated.

Why focus on local news: The tendancy among college students is to pull the national and international news off the wire and forget about campus and community news. This is a poor practice, as the radio station is in a better position to offer college news than the college paper. The paper is limited by space. The radio station can offer more up to date news and in more depth if interviews are used.

How to focus on local news: Develop contacts through the university, local police, fire department, political organizations, etc. Use telephone and protable tape recorder. Keep a list of persons on campus who are available for comment on various subject. Find some professors who are willing to comment on news in their fields--historians, political scientists, sociologists, economists, science professors, etc.

Listeners: Want campus news because campus radio station is only place to get it other than campus paper. Don't neglect national news. Give announcements for plays, etc to studio for broadcast as PSA's, not news. College audiences much more intellectual than average--don't talk down to them. Students want to know about University policy changes, etc. Station has obligation to investigate and report. Must work to get audience to think of station as fast reliable information source. Taylor news to fit interests of audience.

PR: Don't overlook public relations people, but don't get trapped by Public Relations machines. Talk to PR people before buging newsmakers themselves. Secretaries often have much good information. Get both sides of the story.

Documentaries, special Programs: These programs should not be ignorred. The documentary is a good way to cover news in greater depth than local paper. ....helps to spread name of station, gets listeners. Can cover in depth campus, local, community stories which would otherwise be treated superficially. This type of program leads to making it easire to get stories and comments from individuals in the community.

Scoops: Easy to scoop paper on election returns, actions of committees, results of sports events, rallies, etc. Giving stories or interviews fo local newspaper does no harm--some good. Keep tuned to the grapevine. Hang out where news happens.

News Director: Duties--reads local papers, etc for leads, keeps morgue and lists of contacts, sees that follow ups are made, assigns beats, gives news continuity. Some stations have special national news editor to read and edit wire service.

INFORMATION SOURCES ON CAMPUS

Public Information Office, 101 Sproul Hall ***

ASUC Publicity and Public Reletions, 506 Eshleman Hall ***

University Information Office, 101 University Hall **

ASUC Student Union Information Desk ##

Daily Cal

Committee for Arts and Lectures

Activities Office

Campus Bullitin Boards

Sproul Hall Plaza tables and noon rallies

Sports Information Office **

ASUC Senate Meetings and minutes

ASUC Finance Committee Meetings.

The Rep's office on 3rd Floor Eshleman Hall

Dean of Student's office, 201 Sproul Hall

Inter-Fraternity Council and Pan Hellenic

ASUC President and Executive Offices

Chancelor's Office (Dr. Searle in particular)

The Berkeley Daily Gazette and the Oakland Tribune

The Chronical and Examiner Sports Desks (scores)

KSFO broadcasts and news desk.

Campus calendars issued by the ASUC and by PIO

ASUC elections Council

J-Comm.

UC Police Dept. and Berkeley Fire Dept.

Union Program Board

AP News wire in the Daily Cal Office.

*** regular releases to be picked up.
** they mail releases
general questions and occasional election results.

COLLEGE NEWS

"College News and Some Subjective Thoughts on Objectivity"

by Sam Smith
(Lifted from IBS Handbook)

"As in other aspects of college broadcasting, the student takes part in radio news work for various reasons. He may be seeking experience in preparation for a career in radio or television. He may desire an outlet for his creative energies. An extra-curricular activity that takes him away from his academic worries for several hours a week may be what he wants. Or it may be that he simply enjoys radio as a hobby."

"It is important to remember that college broadcasting is not professional broadcasting. On the surface this may seem to be a disadvantage. In fact, it is a distinct advantage. The college station is not under the heavy commercial pressure felt by the professional outlet. It is free to experiment at will, to make mistakes (Ed: Too many mistakes loose audiences.), to speak up to its audience, not down, to discover the potential available in the medium."

"In radio news, this means freedom from the normal restrictions that most professional news staffers endure. There is no necessity to ape the commerical independents two minutes of headline news every hour on the hour. There is, on the other hand, an opportunity to probe news in depth, a chance to present to your audience reliable reporting, interesting documentaries, and a variety of viewpoints. There is no need to sensationalize, to rely on murders, rapes, and accidents to "sell" your product. Instead, there is an opportunity to relate rare and unusual things to a rare and unusual audience. Glibness from the college news staff is not required; frankness is appreciated."

"The listener across the nation seeks enlightenment from news. He wants to have some basis for deciding how to vote, when to buy or sell in the stock market, whether to become concerned about an international development. On the campus, the listeners' demands are essentially the same. He yearns to understand his environment. The newsman's job is to help him."

"In order to accomplish this, the reporter must not only present the facts, but present the facts in balance. Reporters have the ability to create and destroy myths. They must learn to use this power with discretion and the radio station on the campus is a good classroom. In many instances, so-called objectivity is not enough. Reporters faithfully related every statement of the late Senator McCarthy and by this alleged objectivity helped to build a national legand. McCarthy without the press would have been just another senator. Apparently, blind objectivity was insuffieient in this case. This may be journalistic heresy for which the writer shoulders full blame, but it seems to him that carefully examined subjectivity can often be as valuable as unexamined objectivity. It is easy for the news source to wag the news medium, particularly

in this era of public relations. The use of press leaks to test public reaction to new policies has become standard in the national government. The technique of a public figure timing sensational pronouncements for specific paper editions or newspapers often twarts any opposition reaction until the sensation is over. Agin, news sources are constantly buttering up reporters, attempting to push their half of the "objective" story into the news. The reporter may be deluded into thinking that he has lived up to his ideal of objectivity when really he has only heard part of the truth. In each of these situations, the god of objectivity is made to do the work of the devil."

"At the same time, it is notfair for a reporter to editorialize in a straight story. It is not his business to reach an editorial position, but to present facts, ideas, and issued. He should raise questions and doubts if they help to keep the story in perspective, but it is up to the listener to assess the importance of these questions and doubts."

"In an interpretive report, the newsman has more leeway, although again editorializing may destroy the credibility of his information. By understanding the situation as he personally sees it and by pointing out different viewpoints, he leaves the listener room to maneuver his own thoughts."

"The best that any reporter can do is to present the world as he sees it, a view that must be constantly modified by fact. He should not be swayed by sensationalism, fraud, an easy line of argument, emotionalism, the soft sell, or the "these drinks are on me---just take a look at this story" approach. He is fooling himself if he doesn't admit his prejudices, but these prejudices, once recognized, can be kept under control and counterbalanced. For example, the writer is a registered member of one of the two major political parties. When covering political news he has found it helpful to make a conscious effort to ask critical questions of members of his own party. There is perhaps, the danger there of over-balance, but one thing that reassures any responsible newsman is to be accused by a listener of having political views exactly contrary to the ones he actually holds."

"A reporter must have a critical awareness not only of his news and its audience, but also of himself. He sets himself up as the proxy eyes and ears of the listener. Often his client does not know when he has shut his ears to certain facts or closed his eyes as events flash by. The reporter himself, in the mad rush of jourlalism, may also overlook these lapses. He expends his effort keeping up with the flow of the news. He tells himself that he is sticking by the grand traditions of journalism. But the flow of news may be in reality an undertow that sucks facts to the bottom rather than letting them float on the surface. And the traditions of journalism have too often rested upon such unworthy foundations as circulation wars, attempts to gain political power, and total dispespect for the intelligence of the reader. The newsman can take nothing forgranted. Only by constant and critical attention to his work and his words can he construct a more perfect inage of the world around him."

SPORTS FORMAT, BASKETBALL

5:45 Studio: Sports Intro Tape (1 min.)

5:46 Gym: "FROM HARMON GYMNASIUM ON THE BERKELEY CAMPUS, K-A-L SPORTS BRINGS YOU GOLDEN BEAR BASKETBALL. THIS IS _____, ALONG WITH _____, HERE TO BRING YOU THE (Bear Cubs/Blues) VS. _____."

Gym: Warm-up show follows above announcement.

5:50 Gym: Frosh Game.

6:00 Gym: ID: "YOU ARE LISTENING TO K-A-L, 850 ON YOUR A-M RADIO DIAL, IN BERKELEY, AN ACTIVITY OF THE ASSOCIATED STUDENTS OF THE UNIVERSITY OF CALIFORNIA.

Gym: Game continues.....

6:30 Gym: ID: "YOU ARE LISTENING TO GOLDEN BEAR SPORTS ON RADIO K-A-L, 850, BERKELEY.

*** Note: At end of the frosh game, control may be shifted to the studio until the Varsity Pre-game show. During half time of the frosh game, music may be played from the studio.

7:00 Gym: ID

Note: Post game show shall not exceed 10 minutes in length.

Exit: Gym: "STAY TUNED FOR THE VARSITY GAME, CAL VS. _____, COMING UP ON KAL AT 7:50." YOUR ENGINEER HAS BEEN _____ AND THIS IS _____ FOR K-A-L SPORTS IN HARMON GYMNASIUM."

Studio: Sports Exit Tape.

7:50 Studio: Sports Intro.

Gym: "FROM HARMON GYMNASIUM ON THE BERKELEY CAMPUS, K-A-L SPORTS BRINGS YOU GOLDEN BEAR BASKETBALL, CAL VS._____. THIS IS _____ WITH _____."

8:00 Gym: ID

8:30 Gym: ID (Do not return to Studio for half time)

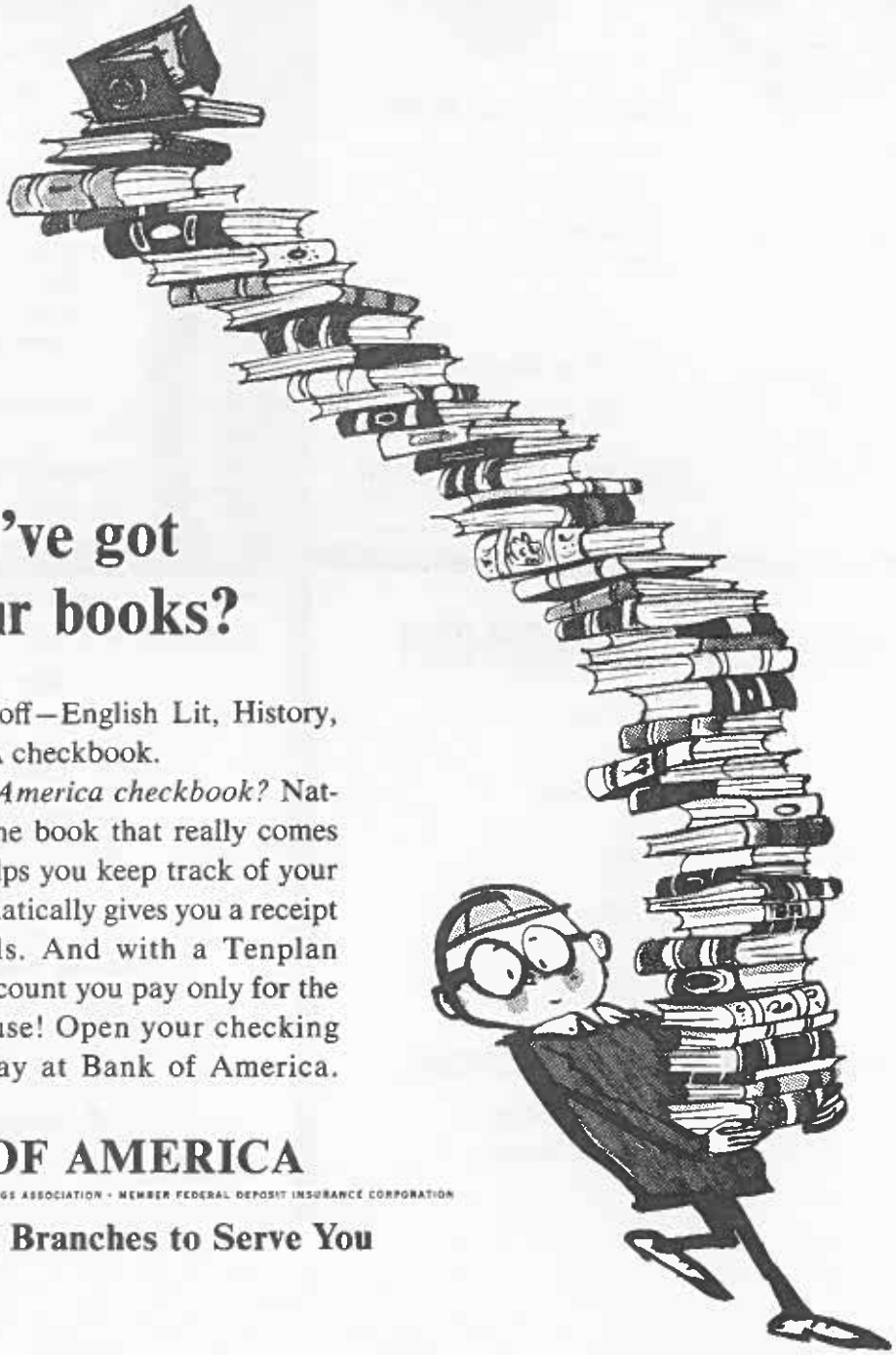
9:00 Gym: ID

*** Exit: Gym: "THIS PROGRAM WAS MADE POSSIBLE THROUGH THE COOPERATION OF RADIO KSFO AND THE DEPARTMENT OF INTERCOLLEGIATE ATHLETICS. YOUR ENGINEER HAS BEEN _____ AND THIS IS _____." (Exit tape follows.)

FROM RALLIES TO RIOTS . . . YOU'RE READY WITH Rough Rider SPORT COAT & SLACKS

Fall Semester, 1965-66
(14 weeks and 3 days of instruction)

Christmas Recess	20 Dec.-1 Jan., Monday-Saturday	Fall Semester begins	13 Sept., Monday
Christmas Holiday	24-25 Dec., Friday-Saturday	Registration	14-15 Sept., Tuesday-Wednesday
New Year's Holiday	31 Dec.-1 Jan., Friday-Saturday	Advance Enrollment	14-17 Sept., Tuesday-Friday
Instruction resumes	3 Jan., Monday	Instruction begins	20 Sept., Monday
Instruction ends	15 Jan., Saturday	Thanksgiving Holiday	25-26 Nov., Thursday-Friday
Final Examinations	17-26 Jan., Monday-Wednesday	Fall Recess	25-27 Nov., Thursday-Saturday
Fall Semester ends	26 Jan., Wednesday		



Sure you've got all your books?

Check them off—English Lit, History, Psych, B of A checkbook.

Bank of America checkbook? Naturally! It's one book that really comes in handy. Helps you keep track of your funds. Automatically gives you a receipt for paid bills. And with a Tenplan Checking Account you pay only for the checks you use! Open your checking account today at Bank of America.

BANK OF AMERICA

NATIONAL TRUST AND SAVINGS ASSOCIATION • MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

6 Berkeley Branches to Serve You

SMALL POSTER APPROVAL

Small posters of a size up to about 15"x24" (approx) that are intended for use on bulletin boards must be approved by the Dean of Students Office in 201 Sproul in order to be posted on University bulletin boards. Practically any neat poster on activities such as those of KAL will be approved. The Dean's Office will post one poster on each of the 75 University Boards if this number of copies is turned in when the poster is approved. There is no charge for this posting service which is done once each week. NOTE: Always have the Dean's Office put up the posters on University boards since any put up by individuals are taken down.

Posters may be ditto'd, mimeographed, printed, hand drawn, etc.

LARGE POSTERS

The large 2'x3' posters that are used around sather gate and other areas of the campus will be painted by the ASUC ART Service (502-504 Eshleman) for about $1.25 each. (Rush jobs of faster than 3 days cost $2.00) This includes all supplies and labor and is not much more than the cost of the supplies alone. If the station wants to paint its own posters the supplies can be obtained from the ASUC Store at a 30% discount. These posters must be approved by the ASUC Activities Office before they can be put up. After approval the ASUC Services Department will put the posters on easels and place them in any of the standard areas for free. KAL can request that the posters be taken down on a certain date, and that they be returned to the station. Ask in the ASUC Activities Office about this poster service.

J Welch
Fall 1965

KEYS AND ACCESS TO FACILITIES

Only Radio KAL members are authorized to operate KAL equipment. For the protection of the station and its property, only KAL members may operate control consoles. Guests may be invited to speak over the air (subject to review by the program director). Non-members must never be left in the studios unless a KAL member is present at all times.

The following officers of the station have studio keys:

1) The station Manager
2) Assistant Manager
3) Program Director
4) Chief Engineer
5) News Director
6) Principal Assistant News Director
7) The University Police
8) Assistant Program Directors
9) Other persons as designated by the Manager when their duties absolutely require their having keys.

Office keys will be issued to all members needing and desiring them.

Keys to the Engineering Maintenance Area are issued by the chief engineer to those needing them. The chief engineer is the sole judge of need.

All KAL keys remain the property of the station and must be returned at the end of each semester or when you resign from the staff. IF YOU LOOSE A KEY, REPORT THE LOSS AT ONCE. There is a deposit of $1.00 required for each key which will be returned when the key is signed in at the end of each semester.

J. Welch
Spring 66

LOG FORMS

Station operating logs vary from year to year, but the sample shown below is typical of a good design for log forms. Provision for providing the following information should be made on each sheet of the log.

Check List

1. The day.
2. The date (day, month, year)
3. The page number.
4. The station call letters.
5. Time on for each program segment.
6. Time off for each program segment.
7. All station ID's and the time they are given.
8. The operator's signature when he comes on and when he goes off the board, as well as his initial after each entry.
9. A description of the program.
10. The sponsor (if any--this is usually eliminated from KAL log forms).
11. The type of program (ID, PSA, news, music, discussion or debate, commercial, sports, etc.).
12. Origination (live remote, live studio, tape, record--electrical transcription, etc.).

Notes

If abbreviations are used, they should be explained somewhere on the log sheet. Noteworthy incidents should be entered in the log, i.e. power failures, rule infractions, equipment failures, etc. Corrections may be made only by the person making the original entry, and he must sign his corrections.

Sample Log

Engineer	Time on	Time off	Radio K A L DAILY LOG 850kc. in Berkeley, Calif.
			Day Date
			Times are in PST PDT (circle one)
			Page number of pages

Sched. Time On	Actual Time On	Type	Source	Length	DESCRIPTION	Engineer Initial

J. Welsh
Fall 1965

UNIVERSITY VEHICLES:

Mr Cooper's Truck: Persons designated each semester by the chief engineer in a note to Mr. Cooper may use the ASUC truck for valid KAL business. To get the truck, sign it out in advance in the Student Union Maintenance Shop. The truck is generally available to us only in the evenings and on the weekends. As we compete with other groups for its use, it must be reserved well in advance. In emergencies, it may be used between 8 and 5 if Mr. Cooper is not using it and if he specifically authorizes its use in each instance by KAL. This is not a right, it is a privilege---do not abuse it.

ASUC Car: The ASUC car may be signed out from the Activities office. It should be reserved well in advance, as it is in very great demand. You may reserve it yourself, but the activities office will not give you the keys until the KAL Manager or Assistant Manager has approved its use in each specific case. The starting mileage, your name, your destination, time of departure and return, return date, and final mileage must be entered on the check out card. The car, the keys, and the check out card must be returned on time or we will loose our access to the car. Gas for the car may be obtained by use of the Union Oil credit card which is kept in the glove compartment. This card is only good in Union Oil stations on State cars. It is not usable on private vehicles or in stations which offer to take any credit card. When in Berkeley, buy gas at the university garage. If you are through with the car early, return it promptly so that others may use it. These vehicles are not to be taken home at night, return them to the ASUC garage. ONLY STUDENTS MAY DRIVE THESE VEHICLES!

UNIVERSITY GARAGE

When a car is not otherwise available, one may be rented from the University garage. The cost of the car (30¢ per hour and 4¢ per mile -- $1.00 minimum) is charged against KAL's budget, so this is an emergency proceedure.

The ASUC activities office will determine whether or not a car is available and will provide you with a card which you must present at the garage (on Oxford Street, near University Hall). The KAL Station Manager or Assistant Manager must approve all rentals of vehicles from the garage.

CAUTION: These vehicles are not always available and can not be reserved ahead of time.

NOTE: You must have a valid drivers license

J. Walker
Fall 1965

LANGUAGE LABS

Location: The Language Lab has a studio in room B-27 Dwinelle Hall (right next door to KAL studios). A shop is located in room B-21 Dwinelle.

Facilities: The recording studio and control room contain a nine input, dual channel Gates console, a patch panel, monitoring equipment, two Presto 10 inch tape recorders capable of full or half track recording at 7 1/2 or 15 ips, an Ampex high speed tape duplicator, Uher 4000s portable tape recorders, an audio oscillator, and a program equalizer.

Lines: Language Lab audio lines go to the following areas:

Educational TV Office in B-55 Dwinelle.

KPFA-FM

KAL (2 lines)

Rooms 145 and 155 Dwinelle Hall

Music Department (Morrison and Hertz)

Little Theatre and Greek Theatre

Pauley Ballroom (shared with KAL)

Use by KAL: The Language Labs will connect KAL to any of its lines if asked to do so. If something important is going on, reserve the line well ahead of time, as KPFA will probably also want to use the line.

Equipment such as Vollensack taperecorders, microphones, a four channel remote mixer, tools, etc. can be signed out by KAL. Be diplomatic and cooperate with Lab employees, or this privilege may be lost.

The studios of the Lab have been used by us a few times by special arrangement. This is not a frequent practice, as it is very inconventient for the Lab.